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SOCIALISATION OF NURSES :

TEACHING AND LEARNING IN HOSPITAL WARDS

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"Social research is not a deductive process, in which everything follows from some clearly defined premises; it is a continuous search for truth, in which tentative answers lead to a refinement of the questions to which they apply and of the procedures by which they were obtained."

Selltiz, C et al

(1965 p. 23).

SUMMARY

The study was conducted in two general hospitals. The aim was to describe and analyse teaching/learning situations occurring in hospital wards, and to identify the characteristics of a 'good' learning environment. Designed in two stages, the research focused on two groups - ward sisters and learners.

Part I comprises an introduction, a brief statement of the system of nurse training, a review of the literature relating to nurse education since 1919, and a discussion of theory relevant to the social order in the hospital ward. Part II describes methods and results of the first stage of the research. Part III describes methods and results of the second stage.

A variety of methods was used. In the first stage wards were ranked retrospectively by using perceptual data from a sample of learners, and ward sisters were interviewed. In the second stage, observations were conducted in three pairs of high and low ranked wards from three specialities. Activity sampling provided an overview of ward organisation, and learners were interviewed about a sample of observed activities, in order to find out how they perceived their work, and to detect 'covert' as well as 'overt' teaching.

Categories of teaching and learning were derived from responses. Teaching and learning varied between wards. The results showed that activities that were perceived as being important for education were technical rather than basic. More teaching took place during technical activities.

Sisters varied in the way they fulfilled their teaching and management roles. It is argued that a traditional model of nursing, dominated by hierarchy and routine, inhibits learning. The ideal environment is anti-hierarchical, and key characteristics are teamwork, negotiation and good communication. There is a team of teachers, trained nurses are available and approachable and the sister makes a conscious effort to make teaching a reality.

PREFACE

For many decades there have been problems associated with the education of nurses in the ward situation. As a nurse tutor I experienced some of the problems at first hand and eventually became so concerned that I felt that I should attempt to do something about them. Rather like having a baby, these problems begin to blur as time passes and one is tempted to think that perhaps things were not so bad after all. So I will recall as far as I can, why I decided to embark on this research.

It is to do first of all with personal tragedy, which made me aware of how helpless a 'helpless' patient is and of the important 'little things' - often referred to as 'basic nursing' - which constitute 'good nursing care'. Too often, it seems, this type of care is delegated to the junior nurses and the untrained. Secondly, it concerns the conscientious people with whom I used to work - nurse administrators who were always struggling to keep wards adequately staffed, teaching staff who attempted to link theory with practice whilst at the same time trying to staff wards, ward sisters who each tried in their own way to serve both patients and learners, and finally, the learners who were often left to cope in very busy wards with little supervision.

There is a strong sense of 'service' amongst all grades of nursing staff, but there is also a philosophy that nurses must 'cope' no matter how heavy the load, and it is not often admitted that short cuts have to be taken. I recall the final incident which led to this research; the tired face of the ward sister as she attempted to care for a ward full of patients with the help of a junior nurse and an auxiliary, and the first year student who struggled unaided to bath a very ill patient because there was no one there to help her. There were signs to indicate that care had not been given on

previous occasions. I stayed to help the nurse and to teach her, and afterwards she said how she wished it could always be like this. Clearly the ward sister who was interested in teaching but over-worked, could not supervise her. So who did the teaching? Who supervised the nurses as they went about their work? What, when and with whom did the nurses learn?

As a tutor, I could withdraw to the quietude of the school, and ignoring the realities, continue to teach the principles of good patient care. Alternatively, I could investigate to find out what happened to nurse education as nurses worked. Hence this research.

I have noted the sentiments expressed by Dickoff et al (1975) that "research activity can become occupational therapy to distract the inquirer from the painful practice situation" (p. 89). I am also in general agreement with their view that nursing research should emphasise solutions to problems rather than answers to questions and that there should be a 'payoff' for nursing. Arguing that in nursing "practice problems are here, now, immense and urgent" (p. 88) and that research questions should not be distant from practice questions they warn that too often a "nursing question is given up to procure a researchable question" (p. 86). Thus there is a danger, that as the research proceeds, the original problems, which sparked off the research, may recede into the background to receive only minimal attention.

It is probable that in the past, nurses have been so heavily engaged in providing care that they have been unable to stand aside and consider the implications of what they do. Berger (1966 p. 32) believes that "the fascination of sociology lies in the fact that its perspective makes us see in a new light the very world in which we have lived all our lives." Berger sees sociology as an end in itself, but my hope is that through this study, sociology may provide insights into practices which have hitherto been taken for granted, so that changes can be implemented for the benefit of nurses and patients.

PART I

PART I.

CHAPTER ONE - INTRODUCTION

The study, which took place in two general hospital which are under the same Divisional Nursing Management and united for the purposes of nurse education, examines teaching and learning in hospital wards. The aims were to describe and analyse the teaching/learning situations, especially those which arose from the working environment, and to identify the characteristics of a 'good' ward learning environment.

Ideally, it would have been preferable to determine a 'good' learning environment by the outcome of a teaching/learning process. But in order to measure the outcome of teaching/learning situations peculiar to one ward, it would have been necessary to ensure that several criteria were satisfied. Firstly, that there was an assessment of learner nurses' 'entering behaviour'; seondly, that there were specific learning objectives for the ward; and thirdly, that there was a suitable method of assessing nursing practice and related knowledge. The system of nurse training obtaining at the commencement of the study did not allow any of these criteria to be fulfilled. Furthermore, Bendall (1973) demonstrated that the methods used to examine nurses were unreliable, for nurses did not do what they said they would do in given situations; in written examinations they described 'ideal' behaviour, but in practice they did not carry out the 'ideal' behaviour which they had described.

Whilst there can be no absolute standard of what constitutes a good learning environment, it is possible to use the opinions of those involved in the education process, for instance ward sisters, tutors and learners, in order to obtain a concordance of view on the characteristics of a good learning environment as experienced by these people, which may also be supported by educational knowledge.

The system of nurse education in the United Kingdom is founded on two assumptions which underpinned the study.

1. That sisters and trained nurses teach in the ward situation.
2. That student and pupil nurses learn as they work.

Although there have been many Working Parties and Committees enquiring into various aspects of nurse education and problems associated with nursing, there has been little research to test these assumptions.

The research focuses on two specific groups - ward sisters and learners. The ward sister is a key figure in the ward for she is the manager of patient care and is also ascribed a teaching role. The Working Party reports, and research relating to teaching and learning in the ward, are reviewed in Chapter 2, but one of the conclusions reached is that despite the expectations of the policy-makers, the ward sister is not a dominant teacher in the ward.

Work studies show that the time sisters spend on teaching is very small (Goddard 1963, Ministry of Health 1968, Scottish Home and Health Department 1969). One aspect of teaching involves the communication of knowledge, but Revans (1964) and Lelean (1973) found that sisters spent little time communicating with their junior subordinates.

In view of the uncertainty about the scope and nature of the sister's teaching role, the limits of the study were extended to take account of findings which suggested that there may be a variety of teachers in the ward. Lamond (1974) reported that nurses participating in her study did not see the ward sister "as the most overwhelmingly important teacher of competent task performance in the ward situation" (p. 34), and that in the transmission of some technical skills "anybody available with sufficient knowledge and skill herself was a good teacher." (p. 28).

Since data about ward teachers was limited there appeared to be a case for focussing on the learner nurse and describing teaching/learning situations in which she was involved. The research, therefore, focused on the recipients of teaching rather than the teachers, in order that all types of teachers and teaching might be identified.

The research design is presented in detail in Chapters 4 and 9, and was conducted in two stages. The first stage was exploratory with objectives

1. To rank and identify wards with 'good' and 'less good' learning environments by using the opinions of learners;
2. To describe characteristics of wards identified as having 'good' learning environments;
3. To describe the sister's perception of her management and teaching roles.

Having ranked wards the purpose of the second stage was to observe the social interactions occurring between learners and other ward actors on 'good' and 'less good' wards in order that similarities and differences in teaching/learning situations could be identified and explained.

Nurse Education - Training for the Register and Roll of the General Nursing Council for England and Wales.

Nurse training in England and Wales was first brought under State control in 1919 with the establishment of The General Nursing Council and Registration of trained nurses. This statutory body, produced its first syllabus of training and record of practical procedures in 1922, and since that time all hospital training schools have been required to follow the current scheme of training.

At the present time, nurses in General Hospitals in England and Wales are able to undertake either of two types of training, which enable them to be Registered or Enrolled with the General Nursing Council.

Recruits for State Registration have to satisfy higher entry requirements than recruits for Enrolment. They follow a three year period of training which commences with an Introductory Course of 6 to 8 weeks in the School of Nursing. Learner nurses are then assigned to training wards and departments to gain specific clinical experience. The General Nursing Council lays down that the time spent in school during the three years should be "not less than 120 days (24 weeks) and not more than 140 days (28 weeks)", (General Nursing Council 1969, p. 67), and specifies minimum periods which must be spent in particular types of wards and departments, and on secondment to the community, obstetric wards, psychiatric and geriatric wards. Because of the precise requirements of the General Nursing Council, it is unusual for a learner nurse to be assigned to a ward for a second period of experience.

Under the 'block' system of training which became compulsory in 1957 learner nurses return to the school at regular times during training for further education in nursing theory and related subjects. The organisation of study 'blocks' is left to individual schools, with some following either a 'speciality' or 'systems' model. In the former,

topics related to a particular speciality such as medicine, surgery, neurology or orthopaedics, are covered. In the latter, diseases of a particular 'system' of the body are the main focus; thus blocks may be referred to as 'Gastro-intestinal', 'Respiratory', or 'Cardio-vascular'. A typical study block would include Anatomy and Physiology, Diseases, care of patients with particular diseases, Microbiology, Pharmacology and practical nursing techniques and procedures. The subjects studied in the school are not necessarily related to the work on wards which nurses have just visited, or are about, to visit. It is, therefore, possible for a learner nurse to work on a ward without having received tuition in related nursing theory.

Before a student nurse can be registered, she has to pass four assessments of practical work and a written examination. Learner nurses following a course of training for registration are referred to as 'students'; such a label implies higher academic ability and a greater knowledge of nursing theory than a 'pupil' nurse who follows a two year training course.

Pupil nurses follow a less academic course lasting two years. They spend 4 to 5 weeks in an Introductory Course, during which time they are prepared for work on the wards. Compulsory ward experience is specified, and pupils return to the school either for half-day or one-day study periods, or for one-week study 'blocks', which are equivalent to three hours per week. The pupils have to pass practical assessments and a short written paper before their names can be entered on the Roll.

Student and pupil nurses are given a syllabus of subjects for examination or assessment, in which they record practical instruction and experience. Although the General Nursing Council stresses that the training should follow the concept of 'total patient care', the syllabus given to the learner nurses comprises pages of lists of tasks or techniques

which are to be practised and learnt, and in the case of student nurses in particular, lists of diseases from which patients may be suffering (Pupil nurses have to list diseases they encounter in some areas). Thus, both schemes of training follow a 'disease and task/technique' model.

During each year, various cycles of training are being followed in the school and training hospital, as nurses commence and finish training, and move from one ward to another to gain new experience. Learner nurses will always be encountered in the wards, as they form about a third of the service staff, and there are few weeks in the year when there are no learners in the school.

CHAPTER 2 - WARD TEACHING AND LEARNING: IDEAL AND REALITY

Albrow (1968) argues that although "the 'sociological standpoint' insists that human beings must be studied in respect of how they act rather than how they might ideally act", any study of organisations must contain an analysis of the organisation's literature of 'advice' contained in rules, treatises and histories, "for such advice is rarely arbitrary." (p. 147) For over half a century many voices have been raised to offer advice on the development of nurse training in the United Kingdom and it will be shown that often the nature of the advice, but more often the rejection of advice, has turned on the issue of power.

It is not proposed to give an exhaustive account of the development of nurse training, but to concentrate on those events, discussions and policies which have a bearing on ward teaching and learning as it is experienced by those currently working in the ward situation.

There is a widely held belief that nurses automatically learn as they work, and that to place them in a ward full of patients to do the work is a valuable contribution to their education. A search of the literature (deficient in systematic research findings) suggests that this, rather than being a description of social reality, is a belief which it has been convenient for various powerful groups, concerned with nursing, to perpetuate. It has some of the attributes of a myth which provides a charter for action (Malinowski 1932). The belief forms part of the ideology of nursing, designed to sustain the contemporary structure of the profession, and legitimates the delegation of the bulk of the work - particularly the menial tasks-to those in training. Primarily, it has been in the interests of the State policy-makers, for nursing has always been closely bound to the economy, and it has been convenient to have a cheap, obedient workforce prepared to take on the work that other

people leave behind. Although the name has changed from probationer to student and pupil, to learner, this workforce in the United Kingdom has been the nurse in training.

Hughes (1971) maintains that the division of labour inside medicine is notorious for its rigid hierarchy and that the ranking has something to do with the 'clean-ness' of functions performed.

> "The nurse... is the right hand man of the physician, even and perhaps especially when he isn't there... she does tasks of people below her and outside her role hierarchy of medicine. It hurts her but she does it. Her place in the division of labour is essentially that of doing in a responsible way whatever necessary things are in danger of not being done at all." (p. 308).

In a ward working environment, where no action has been taken to change the environment to a learning environment to satisfy the needs of the nurse in training, jobs are passed down the hierarchy. Hughes argues that as nurses rise to professional standing, so they delegate more lowly tasks to aides and maids. But, in the United Kingdom where the learner nurse is assigned to the ward as a transient worker, the nurse in training and the auxiliaries do the work the trained nurse leaves behind, namely the physical bedside care.

An apprenticeship type of training, with workers available at all times to do a wide range of tasks, has been of benefit to the State and to hospital managers who have had to ensure that the work arising from the patients was done. The system of training obtaining at the end of the nineteenth and into the twentieth century gave absolute power to hospital managers to use probationers whenever and wherever they needed a worker. At this time the lives of the trainees were totally controlled by managers since they had to live in nurse's homes where they were socialised to a

disciplined way of life, both on and off duty. Those who did not wish to comply could leave, but for most the choice of employment was restricted to 'service' where the discipline and hard work were equally enforced.

Over the years the power of hospital administrators has been slowly eroded as nursing has reflected changes in wider society such as women's suffrage, shortage of single women workers due to better opportunities for the female worker, and shorter working hours for workers generally. The State solved the labour problem in nursing by retaining control of nurse training by the enactment of the Nurses Act 1919. Control of recruitment and training was denied the professional organisation and given instead to its own body, the General Nursing Council, which was dominated by matrons and, therefore, responsive to staffing needs of hospitals (Glaser 1966). It ensured that service needs would be catered for by giving protection to the title 'nurse' but not to the 'practice' of the nurse. Thus, only Registered Nurses could call themselves 'nurses', but with the exception of a few procedures such as administering certain drugs, there was nothing legally to prevent the untrained doing the work of the nurse, with or without supervision.

Doctors have benefited from the apprenticeship type of training since they have been assured of a constant supply of helpers, able and willing to carry out their orders and to take over work which they did not want, but not so highly educated that they could challenge their position. Carpenter (1977) points out that although the nurse was allowed to be the eyes and ears of the doctor, she "could in no circumstance substitute her mind for his". (p. 5) For many nurses, the apprenticeship system of training has meant learning to do and doing whatever a doctor in a particular ward wanted doing, in his particular way.

The education processes for doctors and nurses have remained completely separate and there is no encroachment by nurses into the field of medicine - entry to the profession being strictly controlled through one portal of entry.

Increasing demands for care have accompanied the advances in medicine and ward sisters and managers have often been overwhelmed by the volume of work to be done. It has been convenient for them to believe that nurses learn as they work, for to challenge the belief would have involved them in more work and increasing anxieties, for the two client groups - nurse learners and patients, had conflicting needs requiring re-organisation to create a new social order in the ward. Nurse managers and ward sisters had the power but not always the will/or opportunity to initiate change.

The nurse tutors and later the clinical teachers did not share the belief,but they were a small group dominated for many decades by the matrons. Unable to face the realities of teaching in the ward, they resolved their conflicts by spending minimal time in the clinical situations and withdrawing to the school, which became in many instances "the purveyor of 'ideal' nursing as distinct from what went on in the wards". (Bendall 1973 p. 10). What nurses wrote in examinations was not practised in the ward (Bendall 1973) and skills learnt in the school were not performed in the same way in the ward. (Hutty 1965, Committee on Nursing 1972, Hunt 1974). Clinical teachers, whose proper job it was to teach at the bedside were welcomed by learners when they did this but tended to move away to other posts (General Nursing Council 1975).

The largest group who did not share the belief comprised the learners themselves, but they were too weak to alter the system. The wastage rate for those in training was very high (Ministry of Health 1947, McGuire 1969) as many who were not prepared to tolerate the conflicts and discipline quietly left nursing, leaving behind a workforce prepared to accept the

situation.

At the turn of the century, there were two opposing groups seeking to control the profession of nursing (Abel-Smith 1960). The British Nurses Association upholding high professional standards, irrespective of the staffing needs of hospitals, met with powerful opposition from Hospital Governors and administrators and did not become the major professional organisation. It is perhaps significant that the organisation which flourished to become the largest professional nursing association was the Royal College of Nursing which at its inception gained wide support because it was prepared to give consideration to service needs. Those who founded it and subsequently controlled it for many years were those who favoured an apprenticeship system of training. The rigid hierarchic structure of nursing mirrored for many years in the professional organisation (Carter 1939) ensured that control was maintained at national and local level by senior nurses who did not favour change and inhibited outspoken comments from subordinates at professional meetings. Junior members socialised to obedience were reluctant to speak out against their own matrons for fear of victimisation; a well-grounded fear still voiced at the professional Representative Body Meetings inthe 1970's.

The final group concerned with nurse training is the patients, but they are a weak group and are rarely consulted about the care they receive. They do not have the knowledge to assess the quality of the care or to know, when something has gone wrong, that it could have been prevented. Education and training are to do with the performance of certain skills on the basis of certain underlying principles and knowledge; inadequacies in either may lead to mistakes. Prevention of mistakes is a central problem in nursing.

There is a code of ethics in nursing designed to protect the patient but Hughes (1971) sees a 'code of ethics' as "work organisation's rules of mutual protection among persons in a given category and rank... and these

rules have of necessity to do with mistakes". (p. 341). He writes on mistakes:

> "One who never performs a given action will never do it wrong, but one who has never tried it would not do it right if he were on some occasion compelled to try... Some skills require more repetition than others for the original learning and for maintenance. In some, even the most proficient make many failures." (p. 317).

It is well known that nurses are often allocated tasks which they have not been taught and which they are not competent to perform (Hutty 1965, Royal College of Nursing 1971), and detection of mistakes is very difficult, but some at least are likely to be manifested in the 'complications' which occur. The paradox of nursing is that learner nurses are required to practice and repeat many times, simple tasks in which they are proficient. But often, they obtain minimal practice and teaching in non-repetitive complex skills, which they are compelled to perform in the absence of trained colleagues or when wards are 'short-staffed'. The circumstances under which this happens ensures that social control through 'observability' is lost, since often only the patient with his limited knowledge is present to report what has happened and it is difficult to assess errors, for 'quality of patient care' is an elusive property to measure once care has been carried out.

Nurse training and education, and standards of nursing care are inextricably linked, but so far the measures of outcome either in educational or quality of care terms have proved unsatisfactory, since no one has been able to define exactly what 'good nursing care' is, (McFarlane 1970, Inman 1975), and in examinations nurses describe 'ideal' care which they do not practice in the real situation (Bendall 1973). However, whilst little is known of the outcome, much has been written of the social process of

educating and training the nurse.

The Ideal

The General Nursing Council, as agents of the State, control the recruitment and training of nurses and pay training expenses including the salaries of teachers in the school. Through its policies the Council sets out the 'ideal' for the ward training of student nurses. (1969 p. 2).

> "Learning will take place both in the teaching department and in the wards and departments of the hospital... since nursing is essentially a practical art the majority of the training period will be spent in the wards and departments of the hospital learning and practising nursing skills under the guidance of Registered Nurses."

Similarly the policy is laid down for pupil nurses (1964 p. 1):

> "Some of the subjects will be introduced in the classroom before they are practised by the pupil nurses in the wards and departments under the supervision of the Ward Sisters and other trained staff."

Thus, through its policies the General Nursing Council ascribes a teaching role to staff whom it does not control; namely the ward sisters and other trained nurses. With the exception of the school staff, trained nurses are and always have been, employed and directed by other bodies, such as Hospital Governors or State agents - currently the Area Health Authorities. Concerned primarily with the provision of health services and patient care, they are not accountable to the General Council for the training of nurses. The learner nurses form the bulk of the work force in the hospitals and theoretically the Council has the power to remove trainees from wards and hospitals on the recommendation of its inspectors, but this power is rarely used since it would result in ward closures, because the learners are one third of the N.H.S. workforce. (Bendall 1975 - Rcn Student Conference).

When the learner nurse undergoes her training in the school she is ascribed the role of learner by an organisation which serves one client group - the learners. When she moves into the ward environment she is ascribed the role of learner by the General Nursing Council, but the role of worker by the service staff, for she is entered on the duty rota as a full-time worker. The dominant role of the ward sister is that of organiser of patient care; she is the sole occupant of this role being directly accountable to the consultants who have patients in the ward, and to senior nurses in the hierarchy. She is ascribed the role of teacher but is accountable to no one for the execution of that role, since the outcome of any teaching/learning process in a specific ward is rarely measured. The pressures to serve one client group, the patients, are considerable; the inducements to serve a second client group, the learners, are negligible since those who concern themselves with teaching receive no special remuneration (Wilson 1971 p. 39; David 1975; Bendall 1975), but cause themselves extra work.

The conflicts experienced by ward staff and learners, have been the subject of debate over several decades. The assumption has been made that learners will learn as they work and that trained nurses in the ward will teach as they work, but there has been minimal research to test this assumption. There have, however, been many Commissions and Working Parties reporting on how best to maintain an adequate supply of nurses to staff the hospitals.

Ward Teaching

The conflicts and realities of nurse education in the ward situation were described forty years ago by an English surgeon, Balme (1937). Of the student training he wrote:

> "She is not there as a student, to learn what is the matter with each individual patient and how to nurse each one. She is there as a piece of ward machinery to carry out certain duties which have got to be done." (p. 17).

The Lancet Commission had reported five years earlier and noted the lack of ward teaching, and subsequent enquiries have shown the 'worker' role to be dominant and that there is little action on the part of the ward staff to turn this into a 'learner' role. In particular, if students were learning, it seemed that it was not a function of the ward sister. A Working Party on the Recruitment of Nurses (1947 - Wood Committee) reported:

> "In a large number of hospitals, formal teaching in the wards is negligible. Many students are taught practically nothing by their ward sisters, others may occasionally pick up odd items of information by sheer chance." (p. 34).

This lack of teaching in the wards was confirmed in a Work Study carried out for the Leeds Regional Hospital Board (Goddard 1963). It was noted that in 10 out of 12 wards there was no teaching, and on the others it occurred during 1.8 and 2.2 per cent of observed activities (p. 25). In a later study of five wards (Ministry of Health 1968 p. 1) it was reported that in two wards, sisters spent no time in teaching, and 1.4, 3.4 and 11.6 per cent on the others. A year later, in a study of four wards the teaching was estimated to be about 15 minutes per day (Scottish Home and Health Department 1969 pp. 66 - 69).

Having reviewed the literature on ward teaching, MacGuire (1969) concluded that teaching was limited and drew attention to the discrepancy between the high priority teaching received in the ideal typical situation and the low priority accorded it in reality. "Teaching comes, for most ward sisters, very low down in the rank order of priorities." (p. 112).

Other researchers discovered that ward sisters verbally accepted a teaching role which they would not or could not initiate in the real situation. A Job Analysis conducted for the Nuffield Provincial Hospital Trust (1953) indicated that ward sisters and staff nurses tended to spend more time on ward management than on bed-side nursing and low priority was

given to teaching since it did not occupy a prominent place among their duties, "Although it was everywhere recognised that it should be so" (p.145). Catnach and Houghton (1961) also perceived the discrepancy between the expressed ideal teaching role and the absence of teaching in reality. They were told that ward sisters allocated three quarters of an hour daily to clinical teaching but stated that "in all the 20 days we spent in hospitals, the one and only part of a student nurse's training that we did not see.... was the ward sister teaching the student nurses working in her ward." (p. 21) Thus the assumption that students were being taught as they worked was not supported in reality.

Isolated instances of individual ward sisters teaching have come to light (Revans 1964; MacGuire 1969; Dodd 1973; Barnett 1974), and have also been encountered by the researcher when visiting wards as a tutor. There is some support for the view that ward teaching may be a function of the hospital rather than individuals; however, the issue remains uncertain since research literature on ward teaching and the way in which nurses learn is sparse (Simpson 1967; Clarke 1977).

Studies have been carried out into the communication within the ward. Revans (1964) observing the time that ward sisters spent in conversation with subordinates, found that "the more senior the nurse... the more time she is able to claim from the ward sister" (pp. 27 - 28). The ward sister spent less than 1 per cent of her time in conversation with first year nurses indicating that the time spent in teaching must be far less than this. Lelean (1973) also monitored the communication pattern and confirmed these findings:

> "An average of 38 per cent of the sister's communication was with other Registered Nurses on the ward, this amounted to 20 per cent of her available time. She communicated with the first year student nurse for less than 2 per cent of her available time (the vast majority of this comprising short conversations of less than one minute's duration)." (p. 73).

In the light of the findings the author suggested that it was time to review the role of the ward sister as teacher and either reorganise her work in such a way that she had time to teach or no longer ascribe a teaching role to her and arrange for teaching and supervision of student nurses from other sources.

The cumulative findings suggested that the ward sister was not fulfilling her teaching role, and there was support for the view that organisational constraints prevented her from doing so. Goddard (1963) reporting for the Leeds Regional Hospital Board felt that there was not sufficient time for her to cope with the full responsibilities of her post.

> "Approximately 45 per cent of her working day is spent in actually giving basic and technical care to her patients. General ward administration duties including clerical work, take up another 40 per cent, so that there is little time left to teach". (p. 58).

Ward sisters themselves indicated that there was no time for teaching (Revans 1964 pp. 50 - 51), (Committee on Nursing, Department of Health and Social Security 1972 p. 63), but subordinates held a different view that time was not necessarily the deciding factor and that ward sisters could teach if they wanted to; that it was more a question of the ward sister's priorities (MacGuire 1969, Rcn Student Conference 1974).

The Committee on Senior Nursing Staff Structure (Ministry of Health 1966) cited studies which showed that "only a quarter of the ward sister's time was spent on nursing duties" (p. 32) - considerably less than the Goddard study, and referred to the support which the clinical instructors were giving in the practical situation in the instruction of student nurses. But they still gave prominence to the sister's teaching function in the job description which they produced for that grade of staff (p. 172), thus indicating that they did not expect the clinical instructor to assume the major ward teaching role.

Clinical instructors were introduced into the ward situation during the late 1950's and were registered in Scotland in 1962 and in England and Wales in 1970, a tacit acceptance by the policymakers that there were deficiencies in ward teaching. Sheahan (1972) described the clinical teacher as a "bridge builder between the wards and the School of Nursing" (p. 126). But some clinical teachers encountered difficulties in performing their ward duties. Geddes (1968) pointed out that, in order to be successful in some hospitals the clinical teacher was compelled to "adopt an attitude of servility to the ward sister in whose ward she works where entry to the ward is virtually by invitation." (p. 1405).

It appears that where clinical teachers were able to overcome organisational constraints, their services were highly valued by students, but that because of inadequate numbers, they were unable to teach on all wards. Many left ward teaching to seek promotion; a survey of all teachers registered with the General Nursing Council revealed that a third of the tutors were first registered as clinical teachers (General Nursing Council 1975).

The Committee on Nursing (1972) acknowledged that the ward sister would continue to be the key figure in the ward team with multiple responsibilities which included a teaching role:

> "We regard it as imperative to find ways of relieving the burdens of ward sisters, and freeing them from the day-to-day minutiae so that they can devote their attention to overall planning of care in their ward, with more time to exercise their clinical and teaching skills." (p. 42).

Up to this time little was known about other teachers in the ward. Staff nurses did not appear to play a major role. A study into the Work, Responsibilities, and Status of Staff Nurses (Dan Mason Research Committee 1960) revealed that 66 per cent of ward sisters and charge nurses said

that they arranged the staff nurse's duties so that they could give time for teaching and supervising the students, but many qualified their answers by saying that this was possible "when staff nurses were working with students" or by adding "when time permits." (p. 69). The probability of teaching taking place was, therefore, limited since earlier studies (Nuffield Provincial Hospital Trust 1953) showed that staff nurses spent only 15 to 20 per cent of their time working with students and that they worked mainly with the most senior ones. (pp. 121 - 123).

Lamond (1974) focused attention on other possible teachers. Neither the ward sister nor the clinical teacher emerged as the dominant teacher for it appeared that nurses were learning from each other. Regarding the drawing up, administering and recording of intramuscular injections, Lamond reported:

> "The ward sister was not thought to be particularly necessary in the transmission of this level of skills. It appeared that anybody available with sufficient knowledge and skills herself is a good teacher." (p. 28).

Similarly 'other student nurses' were believed to be the best teachers of oral hygiene and other skills.

There appeared to be some concern at this absence of a dominant teacher and 53 per cent of the nurses said that under ideal circumstances the clinical teacher should be the teacher in the ward situation. 90 per cent of nurse respondents said that "not as much teaching of student nurses as ought to be done was currently being done in the ward situation", and Lamond argued for the responsibility for teaching to be conferred on a definite member of staff in order to allay "the student's anxiety now caused by her lack of appreciation of to whom to relate in the student/teacher interaction." (p. 77).

The most recent validation of the statement that there is little teaching in the ward comes from Bendall (1973 pp. 35 - 37) who carried out 30 hours observation in medical and surgical wards during a pilot study and found that "job instruction was relatively similar in all hospitals, ranging from 3.2 - 5.1 per cent of activities (job instruction being "instruction as to some detail of the job currently being done)." "Non-job teaching on the other hand varied from 0.2 per cent in one hospital to 7.5 per cent in another", the difference being attributed to a Clinical Instructor's teaching during visiting hours. (Non-job teaching being "discussion of the patient's diagnosis, treatment and needs outside the immediacy of the routine".)

A review of the literature shows that the responsibility for ward teaching has never been clearly defined. The ward sister is universally ascribed a role as teacher which she either does not wish to accept or which her role as organiser of patient care does not allow her to fulfill. The changes which have occurred in ward teaching have been minimal despite the introduction of Tutor and Clinical Teacher grades and no dominant teacher in the ward situation has emerged with the result that nurses find teachers from amongst their peers.

If by 'teaching' is meant 'overt teaching', it also seems that the assumption "that sisters and trained nurses teach in the ward situation" is not based on the social reality of the situation. But that does not mean that there is no teaching, for there may be covert teaching which is not observable to work study experts for instance, and in the absence of teaching there may still be learning.

The Conflicts of Working and Learning.

Ward teaching, as a positive, planned activity has been shown to have its limitations: but what of the secondary dimension to ward experience -

teaching by example, learning by doing, wherein the assumption is made that 'learning' and 'working' are synonymous? Can it be assumed that student and pupil nurses learn as they work?

A discussion of the nursing literature would be incomplete without first defining learning. The work/learning dichotomy is a crucial factor in the debate on ward teaching and learning, and it is not possible to assess the evidence without recourse to educational theory. Gagné (1970) defines learning as:

> "A change in human disposition or capability, which can be retained, and which is not simply ascribed to the process of growth. The kind of change called learning exhibits itself as a change of behaviour, and inference of learning is made by comparing what behaviour was possible before the individual was placed in a 'learning' situation and what behaviour can be exhibited after such treatment". (p. 3).

Learning can, therefore, be identified by measuring the change in behaviour before and after the learner has been placed in a learning situation. Gagné maintains that it is necessary to assess the initial capabilities of the learner before determining the conditions for subsequent learning, and argues that there must be planning for learning.

> "One of the most important implications for the identification of learning conditions is that these conditions must be carefully planned before the learning situation is entered into by the student. In particular there needs to be planning in terms of the student's capabilities both before and after any learning enterprise." (p. 26).

It follows, therefore, that for work on the ward to provide 'conditions for learning', that this must in some way be equated to the measured behaviour of the learner doing that work, and that both teacher and learner should know what is to be learnt. Tyler (1964) and others have called for a clear definition of objectives so that the student "can perceive what he is trying

to learn" (p. 77) and Bruner (1961) also argues that "discovery... favours the well prepared mind":

> "For a person to search out and find regularities and relationships in his environment he must be armed with an expectancy that there will be something to find out, and once aroused by expectancy, he must devise ways of searching and finding. One of the chief enemies of such expectancy is the assumption that there is nothing one can find in the environment by way of regularity or relationship." (p. 24).

For nurses as with all other learners there are three domains of learning; cognitive, psychomotor and affective, which are concerned with knowledge, skills and attitudes and values respectively. The debates on nurse education and training, which have continued since the 1920's have been concerned not only with the training of a worker to do a physical job, but have questioned whether the nurse should have the knowledge and understanding to be able to exercise professional judgement and have the ability to apply principles to particular skills. To this end, nurse educationists have attempted to develop the nursing curriculum so that theory and practice are linked, in order to give the nurse the knowledge to understand the implications of her actions.

In a study of the learning process in student nurses, Bendall (1971 a) found that the optimum time relationship between theory and practice is for theory to immediately precede or follow the nursing practice. The 'modular' system of training which has been instituted in some hospitals, links theory with practice in this way, but there are many hospitals where educational principles have not been applied to the working situation.

Furthermore, the syllabus of training does not always match available practice. Major changes in the clinical areas have occurred due to the

changing pattern of diseases and alterations and improvements in medical techniques, but "their effect on clinical experience for student nurses does not seem to have been explored". (Roper 1976 p. 6). There have been few changes in the syllabus or the record of practical instruction since 1922 (Bendall 1971 a). Consequently, the learner nurses may be unable to gain experience in work outlined in the syllabus, whilst at the same time being required to practise work which she considers to be irrelevant to her training needs either because it is not in the syllabus or is rarely the subject of examination. Neither the learner nor the patient is the beneficiary when theory is divorced from practice. On the one hand the patient may receive care from a nurse who does not possess the knowledge to interpret the needs of the patient or to give the care correctly; and on the other, the learner may be unable fully to comprehend nursing practices in the ward because of deficiencies in her knowledge. As a worker she may know how to do the work but she may not understand why she does it.

Nursing has been described as 'essentially a craft' (Lancet Commission 1932) and a 'practical art' by the General Nursing Council, thus in the ward situation emphasis in training is laid on the acquisition of skills. Bendall (1971 a) notes that there are three basic elements in skill learning - response, repetition and reinforcement and that whilst the two former elements create no problem for British nurses, reinforcement is problematic since this involves supervision and correction of mistakes, which may be lacking. Another problem occurs because learners spend their time in the school and the wards under different supervisors and this division of responsibility for teaching between the 'school' and the 'ward' enables each to assume that the other has done the teaching and supervision.

Student and pupil nurses entering a ward are rarely assessed as to their capabilities, with the result that ward sisters have no objective way of placing nurses into work which satisfies the 'conditions for learning'.

They can make subjective judgements by questioning or observing nurses, but one of the major weaknesses of ward teaching is that many ward sisters are unable "to assess the educational needs of individual students in the ward." (Geddes 1969, p. 117).

Whilst educational theories have not always been applied in basic training, they have been incorporated in courses for trained nurses which have been developed by the Joint Board of Clinical Studies (Bendall 1973 a). Emphasis has been laid on the acquisition of skills, for which are needed knowledge in order to do the job, and beyond that, knowledge to understand 'why'. The most complex area, that of 'attitudes', has not been neglected although it is recognised that these are "caught rather than taught" (p. 66) from members of a work group rather than from teachers or administrators.

A review of the literature concerning nurse education in the ward leads one to the conclusion that learning situations generally arise more by accident than by design. The 'ideal' assumed by the State is that learning and working are synonymous, the reality is that this may not always be so. For the issue turns on the status of the repetitive nursing work and there is little evidence to suggest that such work is planned to satisfy the 'conditions for learning' or that there is an expectancy either on the part of the learners or potential teachers that there is anything to learn.

The realities for learners experiencing the conflicts at first hand are described in an anonymous letter written by student nurses to the General Nursing Council (Nursing Times 1967):

> "This hospital seems to be staffed only by student nurses and a few sisters. The student nurses do not get any teaching experience due to the shortage of time and staff. One leaves a ward after three month's drudgery without ever being taught anything whatsoever...

> We find ourselves cleaning and turning most of the incontinent patients all day long. We all know that this is one of the most important parts of nursing but when it comes to one 'back-round' after another with little time for other procedures, we feel that our patients are suffering due to no fault of our own. Sisters here do not seem to be at all interested in teaching us and we are expected to know everything when we are asked to do something without having been shown at all..... The majority of us who have been here for one, two or even three years have done little else but basic nursing, e.g. bed-pan rounds, washes, backs and blanket baths, etc." (p. 1263).

The comments are not unusual and are echoed to some degree in the many reports which have been produced on nursing. The bulk of the work which learner nurses are required to do is of a repetitive nature, but no research has been done to indicate if, when or how it is turned to learning. There has, however, been much comment and criticism from nurses and writers who have reiterated the opinions expressed by Balme (1937) and Carter (1939) about the repetitive nature of ward experience which is often completed without teaching or supervision.

It was clear that too much repetitive work predisposed to high wastate rates. The Working Party on Recruitment and Training of Nurses (Ministry of Health 1947) reported that students compelled to work on the same ward, under the same sister, doing the same type of work were likely to lose interest and abandon training altogether - by implication, the ultimate evidence that repetitive work was held to be irrelevant to training needs.

Other writers have been concerned about the risk to patients when juniors worked without supervision. On ward experience and the risk of mistakes being made, Perry (1968) advised that it was necessary to do more than cast a student into a ward to gain experience and indicated the hazards

of practice without supervision.

> "If a pupil who is learning to clean a patient's mouth practises the wrong technique, clearly she will learn how to clean a patient's mouth incorrectly; unfortunately, she may be unaware that her technique is faulty and, in time, may teach inexperienced nurses the incorrect method." (p. 181).

In surveys conducted for the Committee on Nursing, students complained that there were too many junior nurses in relation to qualified ones and 59 per cent of student nurse respondents stated that there was not enough supervision of junior nurses in their work (1972 p. 71). On repetitive nursing done without supervision, James (1972) asked "How useful is experience without feedback? Twelve month's experience should be different from one month's experience twelve times over." (p. 39).

Wilson (1971) was concerned about the state of nurses' knowledge about the work they were doing and concluded that there was a potential danger to patients due to "the discrepancy between staff nurses' knowledge of biological sciences and the doctors' assumptions of their knowledge" and that, to improve registered nurses' knowledge, changes would probably have to be made in the system of nurse education. She argued that whilst frequent repetition of an activity may contribute to technical competence "it did not appear to affect the level of their knowledge of the related biological sciences". (p. 213) Despite frequent repetition, they could not understand the full implications of their actions.

Jones (1975) carried out research into the feeding of unconscious patients and found deficiencies in both the nursing practice and the theory. The feeding of these patients was left to the junior staff who did not always make the feed to the correct proportions nor test the temperature with a thermometer before administration. Regarding the nursing knowledge about diets Jones found that neither qualified nurses nor those in training knew the energy or fluid intake requirements of patients, and that a high percentage of the diets received by 39 patients over a two day period were deficient

in total energy intakes, fluid requirements and percentages of protein, fat and carbohydrate content. The majority of prescriptions for feeds were given by ward sisters and staff nurses. The author recommended:

> "Qualified staff should give closer supervision to the preparation and administration of nasogastric feeds and draw to the attention of the junior staff who carry out such procedures the underlying principles of nutritional nursing care." (p. 129)

One feature of nurse training to emerge from the literature is how the roles fluctuate, for it appears that the learner nurse may be a worker in the morning when the bulk of the work is done and learner in the afternoons or at other times when the workload is minimal. Referring to the busy morning period and the fact that ward sisters spent most of this time with the doctors, Goddard, reporting on a job analysis on the Work of Nurses in Hospital Wards (Nuffield Provincial Hospital Trust 1953) shows how students have a worker role with no opportunity of being taught.

> "It seems inevitable that student nurses will be left to carry out the main duties of patient care during this period.... It is clear that there can be little opportunity for supervising the work done by the student nurses and virtually none for giving practical instruction, which would need to be planned in advance and free from interruption." (p. 103).

Watkins (1962 p. 7) is sceptical of work studies such as this, which criticise the teaching of ward sisters, and advises that it would be more to the point to look at the extent to which trained nurses and student nurses work together. But studies already cited (Nuffield Provincial Hospital Trust 1953 pp. 121 - 123 , Revans 1964 and Lelean 1973) indicate that trained nurses do not spend very much time either working with or talking to student nurses, and that what contact there is has a hierarchical origin, with the most junior nurses having the least contact with the trained nurses both in work and in conversation.

The search so far suggests that teaching as an active phenomenon, wherein a teacher either actively demonstrates, supervises or communicates knowledge to a learner or provides the learner with an opportunity to learn by planning a situation in which learning can take place, is limited. However, many nurses believe that they teach 'by example'. Teaching by example implies passivity with no extra effort and is a largely unresearched area in nursing, although a few commentators have attempted to define it. Geddes (1969) found from a sample of 500 ward sisters who attended teaching methods courses, that 'teaching by example' emerged as one of three methods said to be used in the ward (the others being, giving the nurses a report and group teaching). Geddes gave the following explanation as to its meaning:

> "It is difficult to state just what is taught by example. If the ward sister is physically involved with the junior nurse in giving care to a patient, it would be more correct to say that she is teaching by doing (demonstration)... it is in the field of interpersonal relationships with staff, doctors, patients and relatives that teaching by example assumes some significance." (p.116).

Therefore, leaving aside the active teaching of knowledge and the demonstration of skills which could take place were a learner to work with or be in the presence of a trained person performing such a skill, what is it that is taught 'by example'? Culpeck (1958) gives a similar explanation to that of Geddes:

> "Ward sisters are under the eyes of their nurses all the time and their manner towards the patients and to their work generally is constantly being watched, and the example set which will not easily be forgotten."

That such a phenomenon as 'teaching by example' does exist is demonstrated by King, Raynes and Tizard (1971):

> "The way in which the role performance of junior staff in hospitals and hostels, mirrors the role performance of senior staff in their respective units, suggests that the unit head - sister or superintendent - is a key figure in establishing and maintaining the patterns of staff behaviour for her unit." (p. 172).

Ward sisters teach by example whether intentionally or not; their priorities become the priorities of other workers in the ward, so that if teaching is low down in the order of priorities, and administration high in the order, this becomes the norm for students emerging as the new generation of staff nurses and ward sisters, thus perpetuating the status quo. However, the search of the literature has shown that the work/learning conflict has other roots, and the lack of teaching is not solely due to the action of the ward sister, but to policies which place the learner in the ward as a full time worker.

Resolving the Conflicts.

The evidence strongly suggests that there is little overt teaching in the ward situation. Over the years many solutions to the perceived problems have been suggested and these fall mainly into two groups: those which concentrate on the teachers and potential teachers, and those which concern the status of the student.

Attempting to resolve the conflicts of the ward sisters, Goddard (1963) having found that only 5 per cent of the ward sister's time was available for duties other than actual nursing and administration, suggested that when calculating nursing establishments "only 20 per cent of the ward sister's time should be reckoned as available for actual nursing duties " indicating that more trained nurses were needed to take over some of her duties.

"Her duties of supervising and co-ordinating the work of her staff, and of instructing student and pupil nurses by practical demonstration have too often been neglected because of pressures of nursing duties, and sufficient time must be allowed for these tasks." (p. 9).

A large body of opinion saw the solution in better preparation in teaching methods for ward sisters. The Horder Committee on Nurse Education and Training (Ministry of Health 1943) suggested that ward sisters should be taught how to teach, and advocated the teaching of theory as well as practice.

"Not only must the sisters have time to impart this knowledge, but they must be trained to impart it in the best way... every ward sister should attend a course on the psychology of teaching... there should be short intensive three month's courses designed for ward sister's needs." (p. 20).

But almost thirty years later, the Committee on Nursing (1972) highlighted the lack of progress. "Few ward sisters have had any preparation for teaching and many of them objected that classroom teaching is not realistic." (p. 70).

Priority was meanwhile given to the sister's management role, for in the 'sixties', management courses for sisters and senior nurses were extensively introduced following recommendations made by the Committee on Senior Nursing Staff Structure (1966). The prompt intervention by the policymakers to improve the work output of sisters, is seen in stark contrast to the decades of inactivity in respect of the sister's teaching role.

The need for sisters to be prepared for their teaching role was a recurring theme emanating from many sources. From within the nursing profession (Royal College of Nursing 1964) it was recommended that:

"Ward sisters, who would be directly concerned in the training of nursing students, and pupils, would need to be prepared for their teaching role if they had not previously undertaken an appropriate course." (p. 37).

It was suggested by Hutty (1965) as a way of bridging the gap between the school and ward situation and was recommended by the Chief Education Officer of the General Nursing Council (Fawkes 1972). Wilson (1971) believed that it should be included in 'First Line Management Courses' which should "be extended to include preparation in how to organise the teaching component of the ward sister's work". (p. 227).

But these courses were not necessarily the ideal venue for such instruction. Davies (1971) indicated that there were misconceptions about teaching whilst working and that many sisters only perceived teaching as a formal transfer of information; a perception that was perpetuated by lecturers on management courses who did not know the details of the hospital situation. Since courses emphasised formal teaching this encouraged "sisters to concentrate on formal rather than informal teaching in the ward situation." (p. 66).

The Nuffield Job Analysis (1953) highlighted the lack of teaching by the ward sister and suggested that one means of ensuring that it was carried out was to place sole responsibility for the practical teaching of students on ward sisters.

The Committee on Nursing (1972) envisaged an extension of the ward sister's teaching role, but emphasised that she should not be required to leave her post, and a member of the committee later explained that preparation for teaching should include "assessing, setting objects, and creating environments suited to learning and the fostering of a spirit of enquiry." (Collins 1977 p. 86).

But although the ward sister was ascribed the major teaching role, there was a move to recruit teachers from all groups of ward workers - doctors, nurses and students. The Dan Mason Research Committee (1960) suggested that staff nurses should be prepared for both ward administration and teaching. Ten years later, the Nurse Tutor Working Party (1970) recognising that clinical instructors were not evenly distributed among training schools in the country, envisaged a team of teachers which included doctors, and asserted that much ward instruction could be given by expert clinical nurses "with the ability to impart knowledge". (p. 91) The ward sister was not specifically mentioned. The Committee on Nursing also acknowledged "the widespread responsibility for teaching by all trained staff in clinical situations" (p. 110) and other nurses called for all nurses to be taught how to teach (Rcn Conference 1975).

The second major debate has centred on the student and her status in the ward situation. The education debate has concerned what the nurse should be able to do, what she should know and where she should be trained; but with few exceptions, recommendations by various Working Parties and Committees have only been considered in the context of a nurse being a worker satisfying service needs.

Scott-Wright (1963), reviewing the development of nursing, described how the apprenticeship system of training with repetitive duties, was being questioned in the United States of America as early as 1923 with the publication of the Goldmark report, and in Canada in 1932 with Dr. Weir's report on Canadian Nursing Education.

But the Lancet Commission Report in 1932 was a watershed for nursing in England, for whilst nurses across the Atlantic were looking to Universities as the base for a system of nurse education in which the theoretical component was increased and non-teaching time spent on the wards, reduced,

the Lancet report firm ly established that service must come before education and that hospitals must not be deprived of the services of probationers, arguing that:

> "To maintain the practical quality, which has distinguished British schools of nursing, such schools should be attached to hospitals, rather than to academic institutions of university status." (p. 162).

From this date, there followed repeated recommendations, to end repetitive duties by separating service needs from education (Balme 1937, Carter 1938, Horder Committee on Nursing Education and Training 1943, Report of the Working Party on the Recruitment and Training of Nurses 1947, Horder Committee on the Social and Economic Conditions of the Nurse 1949).

All attempts to separate service from education failed, and the General Nursing Council in 1948 argued that further elimination of repetitive duties would rob the student nurse not only of the ability to nurse but of the satisfaction which came from nursing. In 1949, following the Nurses Act, Area Nurse Training Committees were established to control funds which were allocated for nurse education - a token acknowledgement that service and education were separate. But just as the 1919 Act had controlled the title 'nurse', but not her practice (for untrained people could do the work of the nurse), so the 1949 Act separated the finance for nurse service and education, but not the nurse's practice.

Demand for a separation of service needs from education, were tempered in that it was often accepted that nurses would still work in hospital wards but that work done by them would be the work that satisfied their needs rather than those of the hospital. A comment in the Report on the Work of Nurses in Hospital Wards (1953) was typical:

> "If student status means anything it surely means that where there is a choice of two tasks, the student nurse should be given the task which builds up her knowledge and skills rather than the one which is necessary to the service needs of the hospital." (p. 145).

Although the recommendations were rejected on a national basis, an experimental scheme of nurse training at Glasgow Royal Infirmary was designed, in which student nurses were not part of the hospital's normal staffing requirements, but gave care to patients in conformity with their own needs and not in answer to the service needs of the hospital (Scott-Wright 1963). The course covered two years instead of the normal three, and theory and practice were carefully linked. Tutors and clinical instructors in a ratio of one tutor to ten students, supervised by day and night, and students of a higher range of intellectual and educational ability were selected. Meanwhile, regular students fulfilled the service needs of the hospital and for them the ratio of tutors to students was 1 to 50.

It was found that the experimental students were able to succeed in the Final State Examination of the General Council in two years instead of three, whilst covering a wider syllabus. They also achieved a level of practical competence in training comparable with students working under an apprenticeship type of training, but in a third 'interne' year as staff nurses they were less competent than regular staff nurses. It was felt that nurses in the experimental scheme had lacked "progressive responsibility and clinical experience" due to "an understandable swing of the pendulum away from the 'evils' of the apprenticeship form of training" (p. 147), and that a correct balance needed to be established.

Although isolated courses were established and based at universities, the majority of nurses continued to be educated under an apprenticeship system. In 1964 the increasing influence of educationists in the professional organisation was reflected in the report of the Royal College

of Nursing Committee on Nurse Education, when they asked for the student to be removed from service needs, so that although she would contribute to the service "she would not form part of the basic staff of the hospital" (p. 21). Once again the report was rejected.

Six years later, the Nurse Tutor Working Party set out their proposals for changes in the system of education for Registration:

> "a planned programme of training, with progression from very limited or no responsibilities for meeting the service needs of hospital and community, to full membership of the nursing team. Nursing students would, as part of their special education, be required to take controlled but increasing responsibility for service." (p. 91).

They also suggested that the number of learners should be related both to the "amount of suitable experience available on which to base a complete plan of training and by the number of qualified nurses able and willing to provide supervision and instruction to the learners" and favoured a "modular system of training in which theory and clinical practice were linked." (p. 91).

In 1972 the Committee on Nursing reported, and although there is a widely held belief that students were to be removed from demands of service on the implementation of its recommendations, doubts about the student's status remain. The indications are that students could remain as workers:

> "Students would contribute to the work of the team whilst gaining experience in controlled situations under the supervision of nurse or midwife teachers and their clinical seniors in the ward". (p. 43).

Whether or not an implementation of the Committee's recommendations which covered all aspects of nurse education, would achieve resolution of the conflicts experienced at ward level, depends on the interpretation placed on the term 'controlled situations'. In 1976 the General Nursing Council announced that it, too, was in favour of a system of training in which students satisfied some service demands but whose educational/training programmes were controlled in reality by committees with statutory powers to ensure that training took place in "selected training areas which would be properly supervised." (p. 1547).

The issue, therefore, turns on control, on power. At a macroscopic level the State controls the work of the learner nurse by assigning her to the wards as a worker. At a microscopic level she is under the control of the hospital staff, whose agent in the ward is the ward sister, but control over her educational needs is vested in the school who have limited control in the ward situation. Thus the conflicts remain unresolved. Little is known about how the work done by individual learners equates to their learning needs - who controls the work, what is taught during the various types of work, nor the identity of the teachers.

Summary of Unresolved Conflicts.

1. Although it has been repeatedly recommended that sisters should be prepared for their teaching role, few ward sisters have received any instruction on how to carry out their teaching duties.
2. Ward sisters are ascribed a role as teacher but a search of the literature suggests that they do little teaching and that it comes low down their order of priorities.
3. Clinical teachers have not assumed a dominant teaching role in most hospital wards.

4. There is no dominant teacher in the ward and learners find teachers from amongst their peers.

5. Although the area is largely unresearched, there is some evidence that learners have low learning expectations in respect of repetitive work that they do, and that they receive little teaching or supervision whilst they work.

CHAPTER THREE

SOCIAL ORDER IN THE WARD - THEORETICAL DEVELOPMENT.

The hospital ward is not an isolated social unit but an integral part of a complex organisation - the hospital. The interaction of individuals and social groups such as ward sisters and learners, within the ward must, therefore, be viewed in the wider organisational context. Whilst it may be relevant to enquire into individual interactions between ward sisters and learners, and at some stage to draw on concepts of social psychology to provide explanations, there are many organisational features to be taken into account when analysing the social relationships within the ward.

This study is concerned with the socialisation of student and pupil nurses and the teaching/learning situations in which they are involved as they interact with other groups. They are but one social group within the hospital organisation. They combine with other workers, both professional and non-professional, to provide a caring and curing service for patients. The learner nurses are peripatetic workers who adopt a transient worker role in each ward to which they are allocated. How they and others perceive this role, and the extent to which the role is prescribed or negotiated, are crucial factors in understanding nurse education in the ward.

The analysis starts with an issue central to sociology; that of the maintenance of order. We are specifically concerned with the question of how order is maintained in the hospital ward, in the face of frequent changes of staff - particularly learner nurses - and patients.

Nurse education is controlled by educationists in the School of Nursing but there is difficulty in defining the organisational boundaries of the school. Physically buildings are set apart and it is possible to describe the School of Nursing as an organisation serving learner

nurses who are clients. But there is an overlap in the organisation for the school extends into the hospital in so far as learner nurses are allocated to spend different periods of time in different wards in the furtherence of their education.

In the ward situation, learners have a dual role of worker and learner and it is the conflicts of their role which must at some time concern us. Theoretically it is possible to argue that the hospital serves two client groups - patients and learners, but in this study we are primarily concerned with the needs of the learners. The point of conflict both in the organisational analysis, and in the real situation, is the learner at work. What is her status? Learner or worker?

A major difficulty in the research has been the choice of a theoretical model which would allow us to examine individual interactions involving learner nurses and members of other social groups in the ward. The difficulty has arisen mainly because there does not appear to be a 'goodness of fit' between the models and the researcher's experiences in nursing. One explanation for the apparent discrepancies between the theoretical models and the empirical situation could be that many of the models have been developed in the United States of America where there are key differences in nurse education (Nurse training schools being separated operationally from hospitals and learner nurses being supernumary to staffing requirements). Another possible explanation is that the researcher may have been too involved in nursing work and local problems and, therefore, unable to see issues which are sociologically problemmatical. But whatever the reason, the problem has existed.

Theoretically, the issue hinges on whether men and women are seen as active or passive actors - people capable of bringing their own personal attitudes and values to bear on situations in which they are involved, or people who constantly conform to norms and values defined by others.

Empirical experiences have led the researcher to perceive the hospital as a 'machine' through which patients and learners are processed, for in the face of constant changes of actors there is much that remains unchanged. However, common sense dictates that a 'mechanical model' is inappropriate, as people are individuals capable of thought and value judgement.

The "oversocialised conception of man" is criticised by Wrong (1961) who believes that the notion that norms are internalised, "affirmed and conformed to" and that man is constantly desiring "to achieve a positive image of self by winning acceptance or status in the eyes of others" (p. 185), takes no account of the desires or power of the individual.

Hall (1975) sees power as a central issue in the choice of organisational analysis; "whether the organisation controls the individual or the individual the organisation." He suggests that a decision has to be made on the extent to which the social structure of the ward is " a metaphor for the collective actions of individual members of staff and other participants or refers to an independent and constraining social entity as expressed in terms of a formal hierarchy of positions or set of rules." (p. 19).

A model in which everyone conforms does not allow for internally generated changes. But if one accepts that individuals do not receive and react to stimuli and cultural values around them in exactly the same way as those who precede and follow, one is able to account for changes - but not for that which remains unchanged. Therefore, one must take into account the power which various groups possess, for people do not need power to conform, but they do need power not to conform.

The choice of model assumes some importance, for depending on which form of analysis is adopted, the issues are to some extent, pre-judged. Where the organisation is viewed as a system in which people come together

in a formal status structure to pursue common goals, the order is a ruled order, for rules shape behaviour in the direction of these goals. With such a model, it is tacitly assumed that roles are taken by passive actors and there is no place for creativity.

One of the difficulties with systems theory of organisations is the definition of goals. Whose goals are they? Etzioni (1961a) maintains that although they can be ascertained from people currently in positions of authority, it does not follow that stated goals are, in fact, the pursued goals. In this study, the probability is that nurse managers and educationists, ward sisters and learners, are all pursuing a different set of sub-goals at different times - a common goal cannot be assumed.

Hall (1975) points to the practical problems of using the systems approach in empirical research at the microsociological level, because of the difficulty in defining the organisation's goals. He refers to a study in which researchers were engaged in action research to improve communication within hospitals (Weiland and Leigh 1971) and comments that although an assumption can be made that the common goal in a hospital is in some way related to patient care, the "maintenance of autonomy for medical, nursing or administrative staff may take priority over a less specific goal of quality of patient care." (p. 27/28) The action of the hospital staff in question was more concerned with power distribution than with the pursuance of a common goal.

These empirical difficulties do not occur when using a social action model, for the organisation is seen as the outcome of the actions of individuals. Account is taken of the action and reaction of individuals so that organisational goals and rules become problematic; the former creating unity towards an ideal in situations where actors have divergent but interdependent goals (Albrow 1968), and the latter becoming the subject of negotiation (Strauss et al 1963). Albrow argues that rules and regulations are often imposed from outside and bear no relationship to the organisational purpose.

A social action model is, therefore, more appropriate for the present study. The view is taken that as nurses in training move from ward to ward, so they interact with different patients and staff members in each new environment and in so doing, they undergo a socialisation process. Whilst they are influenced by the attitudes and values of those around them, this is not a 'one-way' process, for nurses are social actors who are capable of bringing their own individual characteristics to bear on situations in which they are involved.

Nevertheless there are certain reservations. If, theoretically, it is right that the socialisation is a two-way process one would expect there to be evidence of change in the face of the constant turnover of individuals. In each ward there is a nucleus of permanent staff, and patients like learner nurses are transients passing through, but traditions are perpetuated in hospitals and there is a stability about hospital wards which can be identified in these terms. It is possible to re-visit a hospital ward after a passage of several years and to find an Enrolled Nurse doing the same type of work on the same day of the week, at a particular time of day, whilst learners are engaged in the same type of work as were their predecessors in earlier years.

Sociologists have recognised phenomena such as this and use the concepts 'role prescription' and 'routinisation' to describe them. Katz and Khan (1966) see 'role prescription' as one of several devices which have been developed by nurses, to cope with special problems concerning emergencies and to protect from the disastrous effects of error. They advocate an 'open-system' approach for organisational analysis and draw an analogy with living systems acutely dependent upon the external environment, in order to examine the relationship between the organisation and the larger system of which is is part, at all levels from individual to societal.

They see social structure as a dynamic rather than a static concept and argue that a system cannot be understood without a constant study of the forces that impinge on it. They note the historical links between hospitals and the military and the church, and the consequent emphasis on rules, regulations, and a tendency to treat patients as work objects rather than people.

Their analysis is useful because it reminds us that the nursing profession has had to develop within the constraints of wider society, with Victorian traditions of high moral standards and the 'work ethic'. When some of the foundations of modern nursing were laid, the expectations of females were low and nurses emerged as an obedient, subservient dedicated workforce willing to follow rules without question. Simpson (1964) notes how they were trained never to ask 'why' and as seldom as possible 'how' (p. 248). In the hospital environment, nurses play their role within clearly defined boundaries.

It is, therefore, necessary to develop a model which incorporates aspects of discarded models which are particularly appropriate to nursing. Such a strategy would also help to resolve doubts which have already been expressed about discrepancies between theory and empirical experiences. The most serious reservations have concerned the view expressed by Strauss et al (1963) that the hospital is a 'negotiated order'. They see the hospital as a professional locale and describe it as a 'negotiated order' since rules cannot be binding for ever and are set aside as convenience dictates. Negotiation is described as "the process to give and take, of diplomacy, of bargaining, which characterises organisational life" (p. 148). They observe that all hospital actors can enter into negotiations; the professionals such as doctors and nurses, and the non-professionals such as aides, lay persons and patients. Strauss et al conducted their research in a psychiatric hospital, but it is possible that the order varies with the type of hospital and the ward.

The doubts are primarily concerned with the notion that learner nurses enter into situations in which they bargain and negotiate or set rules aside, for there are many reasons for believing that they tend to obey instructions and rules, often without question. However, the doubts will be put to use, and whilst accepting the view that the hospital is a 'negotiated order', the discussion of relevant literature will be addressed to the characteristics which are likely to affect negotiations or interactions involving learners and ward sisters.

Davies and Francis (1976) criticise the 'negotiated order' model because it implies that nurses are in a sufficiently equal position to doctors to engage in bargaining. They believe that negotiation is not possible because nurses are more constrained by rules and procedures, and on the basis of their research argue that only sisters are likely to be involved in negotiations at ward level. Evers (1977) also found that, in contrast to the ward sister, very few student nurses in her sample, felt that they had "any working links with other health care professionals." (p. 592).

The usefulness of the 'negotiated order' model, therefore, appears to depend on whom and what sort of hospital the research is focused. Bucher and Stelling (1969) found the concept particularly appropriate when considering an organisation dominated by professionals. They have clarified the position regarding professionals within an organisation by describing two attributes of a professional organisation - role creation and negotiation. There is little empirical evidence that they would be particularly useful for explaining social interactions involving learners, for it can be argued that they are not yet professionals, but the sister is a key professional nurse in the ward, who can create her role. "Role creation", Bucher and Stelling assert, "is a direct result of the according

of professional status. The professional is the person who has the right to say what should be done and what is necessary to get it done. Professionals thus enjoy considerable success in controlling their working conditions; and characteristically they attempt to insure the working conditions which they consider necessary to implement their own set of professional values." (p. 5). Thus the sister has scope to create her role in conjunction with and within boundaries set by other professionals - particularly the consultants.

There are constraints on the negotiations, and Strauss et al (1963) acknowledge that negotiation in hospitals is affected by professional training, ideology, career and hierarchical position. Thus, in this study of nurses and nursing one must take account of elements which are peculiar to that profession - hierarchy, traditions, and above all, routine.

Ward sisters and learners are involved in different types of negotiation and this can be partly explained by their respective positions in the nursing hierarchy. The sister is the leader in the ward and has the authority vested in the office to be an initiator of rules and orders in the ward, whilst the learner occupies a lowly position in the nursing hierarchy. The changes in nursing management which followed the recommendations of the Committee of Senior Nursing Staff Structure (Ministry of Health 1966) emphasised the hierarchical chain of command with communication into, or within, the ward. Learners have little direct communication with others outside the ward, but the sister occupies a unique 'gate-keeper' role, controlling communication coming into and out of the ward, as well as within the ward itself (Cartwright 1964).

It is clear that negotiation in the ward must, in some way, be affected by the sister's leadership style, for one important element of leadership is communication which, in turn, is a pre-requisite to negotiation.

It seems reasonable to assume that a sister who spends little time communicating with subordinates is unlikely to be involved in negotiations with them. White and Lippitt(1972), in an investigation into leadership styles in a boy's club, identified three types of leadership - autocratic, democratic and laissez-faire. Specifying that all three types were not extreme and that they remained within normal range of leadership behaviour, they described the major features of each type.

The autocratic leader determined all policies, dictated activities one step at a time so that there was uncertainty regarding future steps, dictated work tasks and companions, and was personal in praise or criticism whilst remaining aloof from the group except when demonstrating. The democratic leader encouraged group discussions and decisions, sketched general steps to a group goal, offered alternatives when giving advice, allowed group members to choose work and partner, was objective in criticism and a regular group member without doing much of the work. The laissez-faire leader left the group to make their own decisions, would supply information if asked but did not intervene in determining tasks and companions, and made no attempt to regulate the course of events.

The boys preferred democratic leadership to laissez-faire leadership, produced more and better quality work and were more contented. Democratic leadership was more efficient than either laissez-faire or autocratic and work continued whether the leader was present or not. Democracy was also preferred to autocracy and in the latter situation, although the quantity of work was greater, there was an undercurrent of discontent, with a freer atmosphere when the leader was not present. The democracy was characterised by more 'group mindedness' and friendliness.

The work of MacGuire (1969) and Revans (1964) in addition to many reports on conditions in hospitals suggest that this type of analysis could be used to distinguish between the styles of leadership of different sisters.

Sisters vary in the way they manage the ward, and learner nurses and patients, occupying transient roles in the ward, are involved in uncertainties and react to the ward atmosphere and staff relationships. Patients are sensitive to the state of relationships in the ward and perceive the ward sister as the key figure, particularly for determining the atmosphere. They feel subjected to the same type of discipline as the junior nurses (McGee 1961). Learners are also sensitive to the ward situation, and Birch (1975) reports that 'poor staff relationships' were mentioned by 98 per cent of his sample of withdrawing candidates as contributory reasons for leaving nursing.

Although there is a dearth of empirical data about the type of negotiations involving learners and patients in wards controlled by different types of sister, there are clear implications that the extent and type of negotiations occurring, for instance, on a ward where the sister was autocratic, would be qualitatively different from those occurring on a ward where the sister was democratic. For on the one hand the leader dictates and leaves little room for negotiation, and on the other the leader invites discussion, and therefore negotiations.

The communication of information within the ward is of interest here since power can be retained by withholding information and creating uncertainty. One theme in the literature concerns the uncertainty and anxiety felt by patients due to lack of information. Cartwright (1964) discovered that patients were more critical about the difficulty of obtaining information than of any other aspect of their hospital care.

Reviewing the literature on information, anxiety and pain, Hayward (1975) concluded that uncertainty influenced anxiety, which influenced pain which in turn generated further uncertainty. The results of his research suggested that patients who are well informed about their illness and recovery, report less anxiety and pain during the post-operative period.

Although information appears to be beneficial for patients, information is withheld on some wards. Waitzkin and Stoekle (1976) take the view that in the doctor-patient relationship some control of information helps maintain patterns of dominance and subordination. They believe that uncertainty is experienced more by patients than doctors, and when doctors transmit information to patients they reduce the physician's power within the doctor-patient relationship. Consequently, doctors who withhold information from the patient maintain a dominant position.

Johnson (1972) asserts that professionals have power because they are able to control the producer/consumer relationship. Doctors are powerful by virtue of the body of esoteric knowledge which they control, and even though the nurse may share the knowledge with the doctor she will not impart it without his permission. Cartwright (1964) found that where the doctor did not give information neither did the sister, but when the doctor gave information so did the sister - confirming the assertion of Titmuss (1958) that there may be a 'conspiracy of silence' on some wards. Junior nurses are often closest to the patient since they carry out the bulk of the care, but they are not authorised to give information. The doctor is the guardian of knowledge about the patient's illness and it is accepted by both doctors and nurses that nurses do not impart this knowledge independently.

Katz (1969) argues that doctors also have additional information not available to the nurse and this serves to lower her status. Although the doctor is dependent on the services of the nurse, he has the ultimate power in all matters concerning the patients. Freidson (1973) considers the position of the doctor in relation to other health workers, and believes that doctors have solved the problem of having to rely on the services of many occupations, by having gained from the State, control over their activities. The ward sister, therefore, does not have autonomy in bedside care

but she possesses the authority inherent in the office of ward sister, and can derive secondary power from the sister/consultant relationship (Dodd 1973, Fretwell 1975), which in the ward can over-rule the authority of nurses in more senior positions in the nursing hierarchy. Having created her role in consort with the consultant, the sister is autonomous in the ward so that her values prevail to become the common values of the permanent staff.

The sister is at the centre of the communication network and is, therefore, in a position to communicate and negotiate with and on behalf of others - doctors, patients, nurses and relatives. She is also concerned with the dissemination of information which is not controlled by the consultant and other doctors. This is the information to do with the work of the ward which largely derives from the patient. Nurses require information about the patients, the work to be done, when and by whom. Lack of information about the work causes uncertainty which in turn leads to anxieties. The ward sister is the key figure in deciding what information is relayed to her subordinates and in this way is able to exert control over them in the same way as the doctor exerts control over the patient. The ward sister's leadership style is, therefore, closely linked to the uncertainties and tensions in the ward.

Negotiations between a leader and subordinates are affected by the power relationship; the leader exerts control and the subordinate complies. Etzioni (1961b)uses compliance as the basis for organisational analysis. He defines compliance as a "relationship consisting of the power employed by superiors to control subordinates and the orientation of the subordinate to this power" (pxv). He focuses on the compliance of lower participants and describes three types of organisations according to the means of exerting control over lower participants. Acknowledging that most organisations include all patterns of compliance, he classifies them according to the predominant compliance pattern as coercive, utilitarian

and normative. General hospitals are tentatively classified as normative organisations since remuneration of lower participants is low and, as with religious orders, moral commitment is likely to be high.

Learners are a weak group in the ward and are expected to conform to prevailing norms without question. Coser (1962) draws attention to the expectations of the physician that nurses are 'meek', but this does not explain why learners are content to allow themselves to be dominated. The work of Blau (1964) contributes to an understanding of this. He sees power as part of an exchange process in which the person who "supplies the services in demand to others, obligates them to reciprocate" (p. 22), and where there is nothing to offer in exchange, they comply to his wishes. In 'social exchange' where two parties are mutually dependent, one provides a service whilst the other responds with "deference, gratitude and compliance". In hospitals, it can be argued, that both trained and learner nurses want knowledge and skills held by the doctor and, therefore, defer to his expectations of them. Additionally, the learner nurse requires assistance from the trained nurses, 'good' ward reports from the sister and training facilities in the hospital, in exchange for their compliance.

But lower participants also possess power. Mechanic (1968) examines the conditions under which lower participants such as attendants, nurses, or clerks in hospitals are able to contravene orders and intentions of higher ranking participants. One of the important characteristics of the power wielded by lower participants is the ability to resist change since they can make others dependent on them by "controlling access to information, persons and instrumentalities" (p. 419). Strauss et al (1964) describe how aides and attendants controlled some patients' treatment programmes and Hall (1975) found that a ward domestic held sufficient power to impede progress in a 'play-leader' project. The power possessed

by many of these lower participants is likely to be acquired by virtue of long service; an element not possessed by transient learners. Nevertheless, it is important to be able to include lower participants such as Enrolled nurses and auxiliaries, in the present study of staff relationships in the ward, for these are the people with whom the learner is most likely to associate, and they are in a position to dominate or assist the learner nurses as they progress from ward to ward. Since they are permanent members of the ward staff they have an intricate knowledge not possessed by the peripatetic learners - a knowledge of the ward routine.

A major strategy for maintaining order in the ward is the routine, which impinges on nearly every aspect of ward life and, as this research proceeded it became increasingly clear that it dominated many of the activities in which learner nurses were involved. The ward sister manages and is accountable for the work that is done in the ward, she must communicate work instructions, create social order in the ward and exert social control. The routine is a form of communication between the sister and her subordinates since it encompasses her priorities and rules. Gouldner (1954) sees rules as providing a substitute for personal repetition of orders by a superior and states that once rules have been installed there are fewer things that a supervisor has to direct a worker to do so that frequency and duration of worker-foreman interaction in their official capacities are lessened. Studies in nursing indicate that there is little communication between the ward sister and junior nurses who generally do the routine work. Revans (1964) reported that it was rare for a ward sister to spend more than two minutes in continuous conversation with first year nurses and the more senior the nurse, the more time she could claim from the sister. These findings were confirmed by Lelean (1973). The routine negates the necessity for overt interaction between the ward sister and workers doing routine work; in short, the routine inhibits communication and thus negotiation.

The routine is created by the sister but is a given for learners. It communicates the personal likes and dislikes of both the sister and the consultant and, therefore, varies from ward to ward. The routine reduces the need for frequent visits by the consultant and doctors since it has two aspects. The 'temporal' routine tells the nurse when to do certain tasks, and the 'motor' routine tells the nurse how to do them. Wards are segmentalised along 'disease' lines and as both medical and nurse training follow a disease model, the treatment and care for different 'diseases' or 'operations' are incorporated into the routine to tell the nurse what to do for each type of disease at particular times. In this way, the patients enter into the routine as 'work objects' and the consultant's influence remains in the ward although physically he is not present. Communication between consultant and sister is reduced to a minimum and there is little need for the doctors to communicate with other members of the nursing staff. Conversation between nurses and patients is also reduced since knowledge of the disease provides a paradigm for work and determines the patient's needs, so that nurses are socialised to talk to patients only during the course of physical work - a phenomenon which is apparent in psychiatric nursing as well as in general nursing (Altschul 1972).

The routine allows transients such as learners and part-time nurses to become useful workers in a very short time with the minimum of communication. It increases the work output and is, therefore, an efficient device for getting the work done. Davies (1976) sees routinization of work as one element of an occupational strategy which nurses have employed. She believes that nurses have not sought professional autonomy and control via the creation of dependency but have been content to allow the "subordination to doctors, the acceptance of a wide range of tasks" and "routinization of their work" - the routine lessens stress, protects the nurse from the whim of a superior or doctor and solves problems of labour shortage and a high turnover. (p273)

It has already been suggested that the routine inhibits communication about the work nurses do, but what is of particular concern in this research is how far it inhibits enquiry and interactions of an educational nature, especially when nurses are carrying out their work.

The work which nurses are required to do has never been clearly defined, but it covers a wide range of tasks, such as those which are performed by lay people in their own homes and those which are shed or sometimes done by doctors. Historically, the way nursing work has been divided up is of some significance. The lady pupils were destined to become administrators and 'right hand man' to the doctor, so the proper task of the trained nurse was seen to be administration and highly technical work. Meanwhile, the probationer carried out the bulk of the work directly concerned with the physical bedside care - work in which the doctor demonstrated no interest and about which he required no reports.

It cannot be said that nursing work has been divided up to produce an end product of 'good patient care', for those with the least experience or training do the bedside care. Some nurses have condemned the hierarchical allocation of jobs. McFarlane (1974) asks "why should giving the bedpan have less status than doing a dressing - it is one of the most intimate things a nurse can do for a patient. To do it successfully without embarrassing the patient, to make the right kind of observations, calls for great nursing skills. Yet we say this is of low status and anybody can do it." (p. 443) The Committee on Nursing (1972) noted that patient allocation found favour with nurses who believed that it was better for patients and for teaching, but observed that task allocation was the system used in the majority of acute hospitals.

Task allocation of work and hierarchical allocation of jobs emerge as important characteristics of nursing, which may inhibit negotiations involving learners. Little is known of the teaching and learning which

may take place during a job which is perceived as a low status activity and allocated on a hierarchical basis, or how they may vary under a different system of allocation, viz. 'total patient care', 'team nursing', or the 'nursing process', which are in essence anti-hierarchical and take some account of the patient's needs.

In nursing, routines are devised but they do not always fit the conditions, for patients and problems are constantly changing. When the work is too much for the routine, short cuts have to be taken to give the appearance of normality - but no ward is ever 'normal' as noted by Hall (1975) Brown (1966) believes that the system is task orientated rather than patient orientated, and that "getting the work done" is the primary focus, and "for achieving this end, the system is remarkably efficient... but.... bought at a very high price when viewed in terms of its failure to satisfy many nurses and patients." (p. 190). McGhee(1961) found that patients were critical of what appeared to them to be the "pointless rigidity of the routine" (p. 35) and observed that anything which was outside the routine was liable to be forgotten - a characteristic which was also noted by Bendall (1973).

Neither is the 'disease model' of training to the patient's benefit for depending on the type of ward, attention is focused on a particular disease and/its treatment rather than on the patient. But the needs of the patient do not always centre on the disease, and Roper (1976) shows how patients in hospital suffer from a variety of diseases and often have other needs than those indicated by the label. It is not unusual for signs and symptoms to be ignored because they do not enter the ambit of a particular speciality.

It is to the nature and routinisation of nursing work that we will now direct our attention. There are two aspects of nursing work which are worthy of discussion; the first concerns the stressful nature of nursing work in which a moment of inattention can result in the death of,

or serious injury to, a patient; and the second concerns the close proximity of the nurse to human suffering. The notion that routine behaviour serves to reduce anxiety has been discussed by Abel-Smith (1960) and Menzies (1960). Menzies suggests that the routine is one of several devices which are used to "inhibit the development of a full person to person relationship between nurse and patient, with its consequent anxiety." (p. 101). A ritual task performance minimises the number of decisions a nurse has to make, and reduces patient care to a series of jobs.

To prevent the dire consequences of mistakes, nurses have developed strict rules to govern nursing practices, from the simple to the complex, and these procedures are strictly adhered to. In hospital wards some originate from the sister and others are incorporated into hospital policies. Gouldner (1954) found that workers in industry paid strict attention to rules governing safety, and maintains that rules are a form of communication to those who wish to evade responsibility, specifying "the obligations of the worker, enjoining him to do particular things in definite ways", and whilst they do not eliminate the need for close supervision they reduce tensions created by it (p. 162) - thus it does not follow that because there are rules there need be no supervision.

Brown (1973) observes "surveillance and rules and routines can vary independently, and indeed highly developed rules and routines may be associated with little effective surveillance". (p. 413)

It is suggested here that what has happened in nursing is that rules and routines have displaced supervision, and in addition, a code of ethics reproduced in nursing text-books (see Hector 1970) exhorts the nurses to maintain high standards and obey the doctor. These ethics have long been an important feature of nurse training, being introduced to all nurses at an early stage. They serve the same purpose as rules. There have been

times of severe labour shortages when close supervision has been impossible and the nurse herself, socialised to obedience and self-discipline, has been her own supervisor; believing that as long as the rules were obeyed and the routines completed, the patient would come to no harm. These routines have inhibited enquiry and change so that the profession has emerged "with a traditional rather than an objective approach to nursing problems and without a growing body of facts or figures, or a theory of science of nursing on which practice, teaching or decisions could be based." (Simpson 1967 p. 21)

Thus rules are an inherent part of the ward routine to provide a disciplined framework for work control but by their very nature they have denied the nurse an environment in which learning and enquiry could flourish. This explains a remark made to the researcher in 1950 by a ward sister "You are here to do the work, nurse, not to think." The demand for order and economy in the hospital generally has also led to the development of procedural rules for overcoming operational problems so that all hospital staff tend not to enquire into problems (Revans in Weiland and Leigh 1971) with the result that the nurse also accepts decisions made beyond the boundaries of the ward without question. So the very nature of nursing and the traditions from which is has developed, set firm limits to the type of negotiation in which nurses can be involved, and there is little to suggest that rules are set aside. Routines and rituals are rooted in nursing traditions and the stressful nature of the work.

Merton (1957) sees the'social ritualist' as responding to a "situation which is threatening and excites distrust by clinging closely to safe routines and institutional norms" (p. 184). Thus the nurse, having resorted to rules and routines in order to relieve stress, may under certain circumstances, adhere too closely to the rules with the result that, as Merton describes, "there occurs the familiar displacement of goals whereby an instrumental value becomes a terminal value" (p. 253); the

routine becomes an end in itself - a ritual. That is not to say that all routines are rituals, but that under certain circumstances, routines which were developed for some good purpose are continued long after their usefulness has ceased.

Coser (1962) has observed that the nurse also uses the rules to protect herself against unwanted responsibilities. The advantages of a strict routine for the nurse appear to have been considerable so the routinisation of work has been perpetuated as succeeding generations of nurses have undergone similar socialisation processes. But it would appear that the routines have emphasised work rather than learning.

The workers in the ward are controlled by rules and to some extent by supervision. Merton (1957) believes that the 'observability' of a group's behaviour is a precondition for exercising control over that group. Part of the learning process for students and pupils in the ward concerns the practice of new or complex procedures as well as repetitive or simple procedures. But almost everything which the nurse does either directly or indirectly has implications for the patient, so in any research into the ward learning environment the control that is exerted by the ward sister or her subordinates by way of supervision is of some importance. An essential element in the teaching of skills is demonstration, followed by practice under supervision so that errors can be corrected. It is obvious, therefore, that the supervisor must be in a position both to see what is done and to know that an error has occurred. However, much of the work which a nurse does is performed behind the screens, making control problematic. An apprenticeship system of training implies that the apprentice (the learner nurse) works with and is able to see the craftsman (the trained nurse); it therefore follows that the apprentice must be able to enter situations behind screens with the craftsman. The problem of control in the ward, therefore, has two dimensions - firstly, that the apprentice should be

observable to the craftsman, and secondly, that the craftsman should be observable to the apprentice, for if neither condition is fulfilled, skills cannot be learnt without the risk of error. Thus, although rules are a form of supervision in nursing, they cannot dispense with it entirely if the ward is to be described in any way as a 'learning environment.'

Gouldner (1954 p. 160) discovered that "workers viewed close supervision as a kind of strictness and punishment", and that replacement of supervision by rules eliminated the tensions created by it. But it has been argued that rules cannot replace the supervision of those who are learning. Therefore, it is of interest to know what effect supervision has on those who are in a learning environment. Kendall (1963) investigating the learning environments of various hospitals and the type of supervision that was provided for the house officers, found that a high degree of observability was not related to increased tensions and that closer supervision was welcomed. "Only when behaviour of interns and residents is observable can they receive the kind of supervision they generally report as helpful." (p. 226) Tensions were found by Kendall but these followed departmental lines and seemed "more related to the workload of house officers."

Coser (1962) found that there were differences between medical and surgical wards in that there was a strict adherence to the rules and regulations on the former, whilst on the surgical ward, nurses seemed to have more leeway to relax the restrictions. Key decisions on the surgical ward were always taken by the top surgeons, leaving routine decisions to more junior doctors, so that the nurses received instructions from a variety of sources. The head nurse and other nurses and also patients were able to enter into negotiations so that action followed compromise rather than rules. On the medical floor, the top doctors consulted amongst themselves but nurses only became formally involved in providing information rather than entering into negotiations. They were expected to carry out orders and, in turn, used rules to assert a degree of power. Reviewing the innovation on the surgical

ward and the ritualism on the medical ward, Coser decided that the differences were derived from the social structure of the ward rather than from 'professional' or 'character' traits.

Using perceptual data, Davies and Francis (1976) also found that there were differences in the experience of working in surgical and medical wards. Nurses on surgical wards had to follow rules more as regards the way jobs were performed but involved junior doctors less in problem solving than nurses on medical wards.

The nurse's perception of her work varies from ward to ward. Coser (1963) described how work had different meanings on two different wards; an 'organic conception' of work concerned the human implications, whilst the 'ritualistic conception' of work focused on 'dead matter' where the work was mechanical. Of the latter type of work, one nurse had commented "there isn't anything I find unpleasant. I have done it for so long, I just automatically do it." (p. 237).

Coser draws attention to the suggestion by Hughes (1958) that man's work is "one of the more important parts of his social identity, of his self", so much so that when asked about the work that they do, people respond in terms of "who they are" (p. 43). But Coser rejects Hughes argument and believes that this refers to one type of work and one type of person - unalienated work and unalienated people. Coser comments that where there was a ritualistic conception of work, the work did not contribute to the nurse's social identity, work was a "mechanical type of activity... divorced from self." (p. 240).

Coser's work raises two important issues which are related to nurse education in general and to this study in particular. If the nurse is doing alienated work, which she does automatically, how does she learn of the patient's emotional and physical needs outside the immediate task, and

what are the learning expectations of the learner during work situations where she performs the work ritualistically?

One aspect which is not discussed by Coser but which emerges quite clearly is the different degree of negotiation in the two types of ward. On the ward where there is a ritualistic conception of work there is minimal negotiation between doctors and nurses, and patients are ignored to the extent that the means of communication with nurses is denied them (bells being tied up out of their reach). By contrast, on the ward with the organic conception of work, there is frequent negotiation between professionals at staff meetings and at other times, and patients are also involved in negotiating such matters as protecting their privacy.

Overall, the picture of nursing in hospital wards which emerges, confirms that nurses have limited scope for negotiation. For the most part nurses' work is prescribed regarding both what is done and how it is done, and they have a tightly defined area of discretion. Jacques (1956) shows how responsibility is related to the discretionary element of work. In problem solving, learner nurses have two alternatives open to them - either to interpret the rules or to exercise their skill and judgement. The review of the literature indicates that nurses follow rules, which limits their area of discretion and thus relieves them of responsibility and, it has been argued by researchers such as Menzies (1960), the stress and anxiety which may accompany it. However, Pembrey (1975) reporting on a change from task allocation to patient assignment, draws attention to the fact that nurses responded to, and welcomed, the increased responsibility resulting from the changeover.

Hall et al (1976) believe that despite appearances to the contrary hospitals are not strictly rule governed and that continuous negotiations take place. They liken the ward to "an arena in which are played out the combinations of conflict and co-operation between social actors" but concede

that boundaries are set by less easily changed agreements (p. 149). Hall certainly found that even children engaged in negotiatons. But doubts remain, and if it is right that learners do, in fact, constantly engage in negotiations about the work that they do, the model must be sensitive to the circumstances under which it occurs and, by the same token, the circumstances which inhibit it. Above all the theory must be grounded in the empirical realities.

The search of the literature has highlighted a variety of dimensions which affect the learning environment of the ward and not all can be researched in detail. The order prevailing in the ward is the outcome of complex relationships. The 'structure of the ward' is rooted in the past - traditions, rules, routines and hierarchy, but the order in the ward is changed by the social actors of the present whose actions and negotiations are affected by the power of the various groups. The model, therefore, includes elements of the traditional order but takes account of negotiations which may explain the change to a new order.

Above all, the model is sensitive to an order which is dominated by doctors and to the conflicts experienced by two social groups - the ward sister who organises her ward to serve two client groups, the patients and learners; and the learner nurse who occupies the ambivalent role of worker and learner.

The ward learning environment is not a static concept but is seen as the outcome of the interrelationships of a variety of elements which are constantly changing. It encompasses the different social groups in the ward and the relationships between them; patients from whom the work is derived, permanent workers such as the sister, staff nurses and auxiliaries, transient workers such as part-time nurses and learners, visiting professionals such as the consultants, doctors and clinical teachers and non-professionals such as porters. The change from a working to a learning environment is

effected during the activities when skills, knowledge and attitudes are transmitted to a learner. The ward learning environment is a dynamic concept, comprising units of working/teaching/learning activities. The fundamental question of this study is, therefore, "What is the nature of these activities?"

CHAPTER FOUR - RESEARCH DESIGN

The research was underpinned by two widely held assumptions on which nurse education is based; that sisters and trained nurses teach in ward situations and that student and pupil nurses learn as they work. But a search of the literature suggested that these assumptions were not based on the social reality of the situation, since there was little overt teaching by sisters, and it was possible that learners did not always learn as they worked. There was a sense in which the assumptions could be described as myths.

Unlike a normal classroom situation in which the main participants are the teacher and pupils, the ward environment presented a complex picture, for there appeared to be little overt teaching in the ward, and no assumption could be made about a dominant teacher.

In view of the evidence of the literature there seemed little point in focusing wholly on the teaching activities of the ward sister, as had been one of the original intentions, since there appeared to be a real risk that a host of negative findings would contribute nothing to existing knowledge on ward teaching and learning. It was decided to take an 'open-minded' approach, with few pre-conceived ideas on the nature of the teachers, teaching or learning, and to develop the research around key questions which remained after the search of the literature:

Who are the ward teachers?

What do nurses learn as they work?

However, there was a consensus of opinion that the sister was

a. the manager of ward activities,

b. the person in control of the workers, who are potential teachers and learners in the ward, and

c. the person in control of activities in which they participated.

Thus teaching and learning activities in the ward situation fell within her control. A working hypothesis was formulated as follows:

Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality.

The conceptualisation of the ward learning environment as a dynamic rather than a static concept, in which the environment changed as the actors and ward activities changed, meant that observation by an independent observer, who could observe differences in the social interaction as circumstances changed, was the method of choice. The methodological problem was how to emphasise the differences in teaching and learning in order to describe and explain them.

It is well known by those who work in hospitals that some wards gain a reputation for being 'good for learning' - nurses and others feel that there is much to be learnt and teaching takes place frequently, whilst others are less highly regarded. The research design flowed from an assumption that there are variations in the learning environments, and that observations in 'good' and 'less good' wards would reveal inherent differences in the teaching and learning activities, and that there would be differences in the actions and interactions of sisters and permanent staff members and learner nurses, which would account for the differences in teaching and learning.

Variables affecting the ward learning environment, which fell outside the control of the ward sister were noted:

1. The hospital - e.g. size, type (general, psychiatric), policies, system of training.
2. The ward - size, type, speciality, (which determines patient characteristics - disease from which suffering, age, sex, etc.) staffing (number and quality), workload.
3. The individual - e.g. personal characteristics (age, education, attitudes, motivation, perception of role and priorities) - of all ward actors especially learners, ward sister and permanent staff members.

The research was designed in two stages. The first stage was a 'ranking study' in which wards were ranked into 'good' and 'less good' wards by using the opinions of learners who had previously worked on the wards. In the second stage observations were carried out to obtain data on ward teaching and learning, and the actions and interactions of sisters, permanent ward staff and learners on 'good' and 'less good' wards. Although all the sisters on the six wards on which observations were conducted, remained constant, the learners who ranked wards were not subsequently observed working on wards which they had rated.

In order to compare and contrast ward activities under the control of the ward sister (such as her leadership style, ward organisation and system of job allocation) as well as the ward teaching and learning, it was necessary to attempt to control some of the variables. The 'hospital effect' thought by McGuire (1969) to have some effect on ward teaching, was controlled by confining the study to one school of nursing which served two small general hospitals and a unit in a third hospital. And when the results of the first stage were known, it was found necessary to compare wards of the same speciality since the rank order of wards compiled from learners' opinions appeared to be related to the care/cure nature of the nursing (cure being highly rated and care low rated) and to the turnover of patients.

There were various reasons for observing permanent ward staff and learners in the second stage. Descriptions of behaviour do not always correspond with observed behaviour, and previous research suggested that neither learners nor ward sisters gave descriptions which corresponded with the observations of independent observers. Bendall (1973) found that learners did not do in practice what they said they would do when writing about nursing situations, and Catnach and Houghton (1961) found that although they were told that ward sisters set aside three quarters

of an hour daily for clinical teaching, they did not encounter a ward sister teaching students when they visited wards. Inman (1975) reviewing the 'Study of Nursing Care' series drew attention to the discrepancies between verbal responses of nursing staff and actual ward practices and argued that first hand observation was probably the only valid method of obtaining data on some aspects of nursing care.

Because of the constant changes of ward actors and activities, it was felt that only an outside observer who was independent of ward commitments could obtain an overview of the actions and behaviour of all ward actors, which would also include teaching/learning situations. It was also felt that any working role in the ward would distract the observer from the main objective of collecting data on teaching/learning activities. Furthermore, it would have been extremely difficult for the researcher, who was known to be a tutor by some of the hospital personnel to assume any formal nursing role without interfering in activities which were being observed.

The methods and techniques used in the second stage (described in detail in Chapter 9) were finalised when the results of the first stage were known. It is, therefore, proposed to describe the methods and findings of the first stage before going into any further details about the second stage. The following chapter outlines the methods of Stage 1.

PART II

PART II

CHAPTER FIVE - METHODS USED IN THE FIRST STAGE.

The objectives of the first stage were:

1. To rank and identify wards with 'good' and 'less good' learning environments by using the opinions of learners and tutors.
2. To describe characteristics of a ward identified as having a 'good learning environment'.
3. To describe the sister's perception of her management and teaching role.

Rating Questionnaires.

Rating questionnaires were used to rank wards into 'good' and 'less good' wards from a teaching/learning point of view. They were not intended to produce an absolute order 'good' to 'less good' as only a crude measure was necessary. Rating questionnaires for learners and tutors were designed and are shown in Appendices 1 and 2. The rating questionnaire for the tutors was in fact not used, because the school staff were found to have limited experience of the wards and were able to complete only one or two each. Because of the small numbers involved, tutors completing the questionnaires could have been readily identified, and reporting of results could have affected relationships in the hospital.

The rating questionnaire designed for the learners sought their opinion on several aspects of ward teaching and learning, and although they were seeking opinions rather than attitudes, some of the principles underlying Likert scaling (Moser and Kalton 1971 pp. 361 - 366) were employed, although each item was analysed individually.

Since each learner would be completing four to five questionnaires it was essential that questions were brief and unambiguous. Questionnaires were pre-tested in a school of nursing that was not connected with the main study in order to identify difficulties with the wording of question, to

enable a decision to be made on the advisability of using a four, rather than a five, point scale and to assess the value of asking learners for their comments about teaching and learning on wards.

The format of questions followed a design used by Bendall (1973). The following points were taken into account when designing the final questionnaire:

To include almost the same number of positively and negatively worded items in order to encourage the learner to examine each item carefully.

To avoid negative extremes because of the learners' reluctance to select them. A four point scale was, therefore, adequate.

To include 'unsure' responses in three questions because learners felt this was desirable.

It was also decided to ask learners for their comments on anything that they felt was 'good' and 'not so good' for learning because learners' free comments proved to be a rich source of data for providing insights into the ward teaching and learning.

The rationale for including each of the questions was as follows:

Question 1: There was very much (hardly anything) to learn on this ward.

This probed learners' perception of ward learning opportunities and would give a broad indication of learners' expectations of learning in each ward.

Question 2: Some consultants were very (definitely not) interested in teaching nurses.

This was included to distract attention from the one concerning the ward sister's teaching (as was question 7, relating to the teaching by the clinical teacher). It was not possible to ask specific questions about staff nurses and doctors generally, since they do not usually stay on the same ward for long periods and there would almost certainly have been

changes in the retrospective 18 month period, in respect of which questionnaires were to be given. It was anticipated that there would be a relationship between responses from all questions except these two relating to consultants and clinical teachers, but the responses per se could be of interest.

Question 3: I think all (not many) learners would benefit from working on this ward.

A projective type of question which was intended to explore the suitability of the ward for learners. Learners responding, would have to draw on their own experiences, and observations of other learners, in order to answer the question.

Question 4: The ward sister taught me very many things (hardly anything).

A key question on the ward sister's teaching.

Question 5: There was always someone (rarely anyone) to supervise new procedures.

Direct question about an aspect of 'job instruction'.

Question 6: I learnt very much (little) on this ward.

A key question on ward learning.

Question 7: This is the best ward (one of the worst wards) I have worked on.

As with question 3, this was another way of assessing the ward learning/working environment. It was not intended to produce an absolute order 'best' to 'worst' wards.

Question 8: I liked very much (did not like) working on this ward.

It was believed that there would be a relationship between learners 'liking' a ward and their learning expectations.

An important feature of the research design was that learners completing the rating questionnaire would not be working in the same wards during the second stage when the researcher carried out observations, since the tight schedule prescribed by the General Nursing Council, does not usually allow time for learners to be allocated to a ward for a second period of experience. The characteristics of a 'good learning environment' compiled from the data from one sample of learners, could therefore be checked by using a second sample of learners and different research methods.

Selection of Hospital and Gaining Access.

Since the study was of an exploratory nature, it was not necessary to make a random selection of hospitals, so two hospitals and a geriatric unit in a third hospital which were united for the purposes of nurse education, were selected.

Permission for the study to proceed was achieved by writing in the first instance to the Area Nursing Officer (A.N.O.), who duly arranged for the District Nursing Officer to contact the researcher. The letter to the A.N.O. contained information about the funding body, the University attended and brief details of the research topic. An interview with the District Nursing Officer and Divisional Nursing Officer was arranged, during which the researcher gave a broad outline of the research and answered questions. The senior nurses agreed that the research could proceed and said that they would inform the hospital and school personnel that the research had been approved. The researcher was then able to contact ward sisters, school staff and learners as the need arose. It was subsequently made clear to those whose help was required, that although the research had been approved, they were completely free to decide whether or not they wished to assist in the research. The subsequent cooperation

from all grades of staff was almost 100 per cent.

In the initial stages of the research, difficulty was experienced in deciding how to describe the research topic. It was realised that behaviour and responses of ward staff could be influenced by the knowledge that the research was concerned with nurse education in the wards, but ethically it did not seem desirable to exclude such a reference. After considering all the relevant arguments, it was finally decided that an explanation should be given to all groups that the research topic was "How nurses learn in the ward situation". This allowed pre-knowledge of the broad topic, but directed attention on to the learner rather than the teacher and teaching.

Sample of Learners.

Rating questionnaires were given to a sample of students and pupils who gained experience in the wards of St. Anne's Hospital, St. Joan's Hospital and a geriatric unit at Agatha's hospital. Throughout training, all the learners were taught at regular intervals in the school of nursing which served all the hospitals. Intakes of students occurred in September and January when new learners spent 6 weeks in the Introductory Course in the school. During the first two years of training 'blocks' of 4 weeks in school were attended every 6 months, and during the third year there were 'blocks' of 4 and 2 weeks.

Intakes of pupils took place in May and November and the Introductory Course lasted 4 weeks. Pupils then attended six separate 'blocks' of 1 week's duration during the succeeding two years. The theory and practice taught in the school did not necessarily coincide with the ward experiences - in other words, a 'modular' system of training was not used.

Apart from short periods in July, August and December, there were learners in the school of nursing throughout the year.

In October 1975 examination of the allocation records revealed that the total population of learners in training (excluding the Introductory course which had commenced the previous month) was 178. It was decided to use a process of cluster sampling by taking all the complete units of students and pupils who would attend the school of nursing during the period October to December 1975. Each unit would comprise students or pupils who had entered nursing in the same Introductory course, and there would possibly be extra learners such as those who were undertaking shortened training (e.g. those with other nursing qualifications such as Registered Mental Nurses)who were scheduled to complete training in a shorter time, or nurses who had missed a previous 'block' because of illness. During this three month period no nurse would attend school more than once.

Table 1 shows the distribution of students by year. There were 51 first year students (nurses who entered training between September 1974 and September 1975), 46 second year students (nurses who entered between September 1973 and September 1974) and 34 third year students (nurses who entered between September 1972 and September 1973). The sample of students was made up as follows: 25 first year students (49%); 17 second year students (36.9%) and 9 third year students (26.9%). An overall sample of 51 students (38.9%) of students in training was achieved by this method, but senior students were under represented.

There were 29 first year pupils in training and the sample for this group was 29 (100%). 7 out of the 18 second year pupils (38.9%) were included in the sample. The total population of pupils was 47 and 36 were in the sample, (76.6%). As with the students the senior pupils were under represented. The total number of learners in the sample was 87 (48.9%).

TABLE 1 ST. ANNE'S AND ST. JOAN'S SCHOOL OF NURSING.

		Percentage.
Total number of learners in training (excluding Introductory Course)	178	100
Total number of learners in sample	87	48.9

STUDENT NURSES	TOTAL	SAMPLE	PERCENTAGE
First year students (excluding Introductory Course)	51	25	49
Second year students	46	17	36.9
Third year students	34	9	26.5
Total number of students in training (excluding I.C.)	131	51	38.9
PUPIL NURSES			
First year pupils	29	29	100
Second year pupils	18	7	38.9
Total number of pupils in training	47	36	76.6

There were important reasons for using this cluster sampling over time. Firstly, the learners were going to be given rating questionnaires to complete in respect of wards on which they had worked and they were also going to be asked to comment on factors which they regarded as 'good' and 'not so good' for teaching and learning. It was most important that the ward staff were protected from knowledge of the rating questionnaire's contents since it might prevent co-operation in the second stage. The researcher, therefore, did not want to have questionnaires circulating in the wards and wanted to deter gossip about the research. Secondly, it was important that respondents completed the questionnaire in private without consultation or interference from others. The only way of guaranteeing such conditions, other than having the questionnaires completed in school, would have been for the researcher to see each respondent individually, which would have been impossible and would have caused too much disruption on the wards.

It was, therefore, believed that the advantages of using this method outweighed the disadvantages, especially as the main purpose of the rating questionnaires was to identify 'good' and 'less good' wards in a somewhat crude way. The researcher also believed from her own experience that there would be similar responses from all groups and that the disproportionate representation of some groups would not seriously affect the rating.

The tutorial staff were very co-operative in arranging for the researcher to see each group of learners. Only 3 learners were away from the school when the researcher visited the school, but these nurses were contacted later in the hospital. The response rate was 100 per cent. It is recognised that the learners were, in effect, a captive audience, but after giving all groups a similar introductory explanation about the purpose of the research (viz. that it was hoped to improve patient care

through improved nurse education), the researcher assured all nurses of complete anonymity and told them that if they did not want to take part they were perfectly entitled to refuse. Great stress was laid on the fact that the code numbers that they were to be given were to be used only for administrative purposes. The researcher took as evidence that the learners wanted to co-operate, the fact that nearly all the nurses in two of the groups, had to leave the room to collect pens and books but all the respondents return to complete the questionnaires!

Each nurse was asked to complete a rating questionnaire in respect of each ward on which she had worked during the period May 1974 to the time of the questionnaire completion (October to December 1975). It was specified that the minimum period of 4 weeks must have been spent on each ward. (A typical allocation was 8 to 12 weeks). A retrospective rating period to May 1974 meant that no nurse had to cast her memory back more than 18 months (nurses in a pre-test had no difficulty in doing this). A check list was compiled from allocation records to ensure that each nurse filled in a questionnaire for each relevant ward. Nurses were asked to tell the researcher if there were any errors.

When compiling the check lists of wards to which learners were allocated, the researcher noted very few occasions of repeat allocations. A small minority of senior nurses had been allocated to the same ward on two occasions, but this had occurred before the school had changed its policy to one allocation per ward. There were also a few occasions when nurses had returned to a ward to complete an allocation which had been curtailed because of illness.

TABLE 2 - TABLE SHOWING WARDS USED IN SAMPLE AND NUMBER OF RATING QUESTIONNAIRES COMPLETED IN RESPECT OF EACH WARD.

Ward	Type	Hospital	Code	Students	Pupils	Total
Merton	Ophthalmic	St. Joan's	ME	5	1	6
Wendy	Paediatric	St. Anne's	WE	16	0	16
Heaton	M. Orthopaedic	St. Anne's	HE	15	12	27
Ursula	M & F Geriatric	Agatha's	UR	25	16	41
Charlotte	Female Surgery	St. Anne's	CH	11	14	25
Naomi	F.Orthopaedic	St. Anne's	NA	21	15	36
Simon	Male Surgery	St. Anne's	SI	16	14	30
Neville	Male Medical	St. Joan's	NE	14	10	24
William	Male Surgery	St. Joan's	WI	17	7	24
Irena	Female Medical	St. Joan's	IR	16	9	25
Elizabeth	Female Surgery	St. Joan's	EL	19	11	30
Peter	Paediatric	St. Joan's	PE	2	13	15
Grace	Female Geriatric	St. Anne's	GR	8	5	13
Frederick	Ear,Nose & Throat M, F & Ch.	St. Anne's	FR	12	3	15
				197	130	327

AVERAGE NUMBER OF RATING QUESTIONNAIRES COMPLETED BY EACH LEARNER = 3.8

There were 87 learners in the sample. 86 learners completed rating questionnaires - 1 student had not been on any of the wards.

The wards which were included in the sample of wards, were all those wards to which students and/or pupils were allocated. However, wards on which there had been a change of senior ward sister during the retrospective rating period were excluded, since the ward sister was a key focus of the research. Theatres and departments were also excluded.

The sample of learners completed rating questionnaires in respect of 14 training wards. Two medical wards were excluded because of the change of senior ward sister. Another ward, Merton, which was a highly specialised ophthalmic ward, was also excluded in the early stages on the grounds that it was highly specialised and there would, therefore, only be a small sample of learners allocated to it. On reflection, the researcher could think of no valid reason for excluding the sister or the ward from the study since it satisfied the other criteria. Nurses who had been on this ward during the relevant period and who came from the cluster sampling units, were therefore contacted individually. Only 6 learners had, in fact, been on this ward during the relevant time.

It can be seen from Table 2 that questionnaires completed for other wards ranged from 13 to 41. There were 87 learners in the sample. One learner who was undertaking a shortened period of training, had not been on any of the wards in the sample. Therefore, the average number of questionnaires completed by each learner was 3.8.

One of the difficulties associated with a study such as this, where data is drawn from nurses in respect of wards on which they have worked is the fact that very few of the learners will have worked on the same combination of wards. Table 3 shows the wards on which a sub sample of learners had worked during the first year of training. Only two pairs of learners had worked on the same three wards, and three pairs of nurses had been on the same three wards. It would be extremely difficult, indeed impossible, to devise a sampling technique which would produce strictly comparable data.

Table 3. Ward experience of sub sample of first year nurses.
(The table does not show wards not included in the ward sample).

	Wards (see Table 2 for ward details)												
Nurse code number	WI	NA	UR	ST	HE	CH	GR	IR	FR	NE	EL	WE	PE
2a1	X	X	X										
2a2				X	X		X						
2a3	X	X			X	X		X					
2a4				X		X	X	X					
2a5			X	X	X			X					
2a6	X	X								X			
2a7		X			X				X	X			
2a8	X	X			X			X	X				
2a9					X	X							
2a10			X							X	X		
2a11		X				X	X						
2a12	X				X			X					
2a13		X	X							X	X		
2a14			X					X			X		
2a15	X	X						X					
2a16							X		X		X		
2a17			X	X					X				
2a18	X							X					
2a19			X	X				X			X		
2a20						X						X	
2a21			X	X									X
2a22			X	X									
2a23		X	X							X	X		

The table illustrates the difficulty in obtaining a sample of nurses who have had similar ward experience. Only two pairs of nurses (2a23 & 2a13, and 2a3 &2a8) have been on the same four wards.
Three groups of three nurses (2a10, 2a13 and 2a23, 2a3,2a8 and 2a12, 2a3,2a8 and 2a15) have been on the same three wards. Three pairs of nurses have also been on the same three wards (2a7 and 2a8, 2a14 and 2a19 and 2a5 and 2a19).

Completion of Rating Questionnaires.

Regarding the learners questionnaires, all groups were given similar introductory explanations and instructions to ensure maximum comparability between all units. Each questionnaire was issued separately and learners were asked to complete the rating questionnaire first. They were then requested to make brief comments in respect of each ward, on the blank reverse side of the rating questionnaire. They were asked to comment on anything which they thought was 'good' about the ward, which helped them to learn well on that ward; anything which they thought was 'good for learning' They were also asked to comment on anything which was 'not so good for learning'. The term 'bad' was not used, because of the reluctance of learners in the pre-test to comment on anything which was 'bad'. However, when comments were collected the majority of nurses had divided the comments into 'good' and 'bad'. It is important to note that the comments of the learners were made immediately after completing each questionnaire. The issues on which they had given specific assessments were, therefore, foremost in their minds. The instructions regarding the comments were given 'verbatim' to each group, therefore the comments which learners made were completely spontaneous.

In order to assist the reader in assessing the validity and reliability of these comments, the verbatim instructions used by the researcher are given below:

> "After you have completed the questionnaire, I would like you to turn the paper over and make brief comments of anything that you thought was good about the ward, that helped you to learn well on that ward; anything about the work, practices or people, that <u>you</u> thought was good for learning. Then make a brief note of things that you thought were not so good for learning. These comments

are a very important part of my research, I don't want to put ideas into your heads by giving examples. Give me your opinions."

Analysis of learner's questionnaires

The questionnaires were hand sorted and responses recorded separately for students and pupils according to year of training. Second and third year students' responses were recorded together.

A score of 4 was given to the most favourable response, which could be either a. (first statement) or d. (last statement) according to the order of the statements. (See Appendix 1). Other responses received a score of 3,2 or 1 in positive to negative order. A mean score for each question was then calculated. Appendix 5 gives the mean scores for individual wards so that variations in responses between learners at different stages of training can be compared. It is thus possible to detect any trends which may have been more apparent with a more balanced sample (i.e. with equal proportions of third, second and first year learners). No chart has been prepared where the sample is under 3 for any group of learners, but in some wards results must be treated with caution because of the small samples. However, in some wards there is an apparent difference in the perception of learners at different stages of training and these will be discussed later.

Mean scores were calculated for all questions based on responses from all learners. Wards were then ranked according to nurses' perception of what they had learnt on each ward and this ranking was held constant when charting or tabulating responses to other questions, to facilitate comparison between responses to other questions. Mean scores, which are charted in Appendix 4, however, fail to take account of the scatter of responses, so tables are also included to show the percentages of learners making the varying responses for each ward. Thus readers will be able to identify wards which are given high or low places in the ranking, and wards where the trend of responses is in a positive or negative direction.

Learners' comments about anything which was regarded as either 'good' or 'not so good' for learning, were recorded on cards and sorted into broad categories as successive responses were obtained. In many cases, learners'comments explained responses to the specific statements selected in the rating questionnaires. The categorisation and analysis of these comments proved to be a very time-consuming and laborious process, but the researcher considers that the findings justify the time and effort which have been expended.

The results are tabulated in Appendix 6. Categories are also explained and examples of comments given. These comments are a vital part of the research, since the learners have described behaviour and activities which could not have been altered by knowledge of the research topic; research in these wards had not commenced when these learners were on the wards. There is, however, a possibility that reports of events may have been influenced by events which occurred after the ward experiences. For instance, one learner prefixed her comments with the statement "I can only talk good about this ward because sister gave one of the best reports". Another also referred to her report "I was upset at my report because I believe I tried hard to put all my feeling into the work."

CHAPTER SIX

RESULTS AND DISCUSSIONS OF FINDINGS OF STAGE ONE

Learners' Perception of Learning Opportunities.

Analysis of question 1 responses (there was very much to learn on this ward - there was hardly anything to learn on this ward), which are tabulated in Appendix 4, suggested that nurses' perception of what there was to learn on a ward was related to variety of diseases, length of stay in ward and variety of procedures to be performed.

The rank order achieved on these results was as follows:

TABLE 4 LEARNERS' PERCEPTION OF LEARNING OPPORTUNITIES ON WARDS OF DIFFERENT SPECIALTIES

Ward	Mean Score	Rank Order	Type of Ward.
Charlotte	3.64	1	Female Surgical
Wendy	3.63	2	Paediatric unit taking all sick children from wide area.
Simon	3.37	3	Male surgical with Intensive Care Unit.
William	3.33	4	Male Surgical.
Neville	3.33	4	Male medical with specialist equipment for Coronary Care.
Frederick	3.33	4	Male, female and children's ENT unit.
Elizabeth	3.27	7	Female surgical and Gynaecological.
Merton	3.17	8	Male and female opthalmic.
Heaton	2.93	9	Male othopaedic and trauma
Irena	2.72	10	Female medical.
Naomi	2.64	11	Female orthopaedic.
Ursula	2.22	12	Male and female geriatric.
Grace	1.87	13	Female geriatric.
Peter	1.8	14	Children's ward taking limited type of cases.

Of the three lowest ranked wards, two were geriatric units and the third a paediatric ward which took patients with a limited variety of conditions. Of the seven wards which achieved a mean score of over 3.25 for this question, two (Wendy - paediatric and Frederick - Ear, nose and throat diseases) were specialist wards and the work in the ward, therefore, constituted a new field to most of the learners, whilst the others, with the exception of Neville, were surgical wards where one would expect to encounter nursing of a more technical nature than on a medical ward. Simon ward was a male surgical unit with an adjoining Intensive Care Unit in which there would be nursing of a highly technical nature, so this probably accounted for the slightly higher score achieved by Simon compared with William, the other male surgical ward. Neville also had special equipment for the treatment of patients with coronary diseases. What is less certain, is why Charlotte (female surgical ward) achieved a substantially higher score than Elizabeth, which appeared to have two reasons for being higher in the ranking since it was a mixed surgical and gynaecological ward. Unlike Simon, Charlotte did not have an Intensive Care Unit and there was very little difference in the average age range or length of stay in the ward of patients in either Elizabeth or Charlotte which could explain the differences in the two mean scores. (Table 5) The greater awareness of the learners on Charlotte, that there was very much to be learnt on the ward, would therefore have to be explained by other factors.

Merton ward was a specialist ophthalmic unit and the average age range of 60 years to 80 years (ward sister's estimate) indicated an older patient than those on the wards which achieved a higher ranking. Although the patients were elderly, their stay in hospital was much shorter than patients on wards ranked below Merton with the exception of Peter and about the same as those ranked higher, (no data was available for Irena but as a female medical ward one would have expected there to be a high proportion

TABLE 5 - WARDS RANKED ON LEARNERS' PERCEPTION OF WHAT THERE WAS TO LEARN ON A WARD, AND DETAILS OF PATIENTS' AGES, DISEASES AND LENGTH OF STAY IN WARD (NB: These are details based on Ward Sisters' estimates.

Ward	Rank	Estimated average age range	Most common diseases/ operations	Estimated length of stay
Charlotte	1	14 years - 70 years	Colonic surgery Thyroidectomy Cholecystectomy Mastectomy	3 weeks. 10 days. 4 - 10 days. 10 days (average 2 weeks
Wendy	2	Few weeks - 14 years	Gastro-enteritis Fractures Respiratory diseases Meningitis Feeding problems Circumcision Hernia Appendicectomy	3+ days 1 - 7 days 2 - 7 days 5 - 14 days 1 - 7 days 1 - 5 days 2 nights 7 days (turnover 40 per week)
Simon	3	No data		
William	4	28 years - 72 years	Prostatectomy Leg amputations Gastric surgery Vascular surgery	8 days 3 weeks - 3 mont 1 week 4 weeks
Neville	4	50 - 70 years	Myocardial infarction Hypertension Social problems (label for patients who had conditions e.g.Ceribro-vascular Accident, which have prevented return home)	3 weeks 2 weeks 3 months
Frederick	4	5 years - 60 years	Infected tonsils Nasal obstruction Laryngoscopies Acute otitis media Stapedectomy Epistaxis	5 - 7 days 7 days 3 days 7 days 4 - 7 days 5 - 7 days

Table 5 cont....

Ward	Rank	Estimated average age range	Most common diseases/ operations	Estimated length of stay
Elizabeth	7	24 years - 73 years	Hysterectomy Cholecystectomy Repair of prolapse	10 days
Merton	8	60 years - 80 years	Cataract Retinal detachment Glaucoma	7 days 10 - 14 days 7 days
Heaton	9	13 years - 80 years (only minority elderly)	Fractured shaft of femur Osteoarthritis of hip Other fractures	1 - 3 months 2 - 3 weeks 3 months
Irena	10	No data		
Naomi	11	55 years - 80+ yrs.	Fractured neck of femur Fractured shaft of femur Low back pain	3 weeks - 6 months 3 months 5 weeks
Ursula	12	No data		
Grace	13	75 years - 90 yrs.	Cerebro-vascular accidents (stroke) Rehabilitation after fractured femur Social problems	2 years+ if do not rehabilitate 12 months Up to 12 months.
Peter	14	3 years - 12 years	Removal of tonsils and adenoids Appendicectomy Circumcision Squint	4 - 5 days 5 - 7 days 1 day 3 days

of elderly patients who would need to stay in hospital for more than 2 weeks). Merton's relatively high score appeared to be mainly due to the fact that it was a highly specialist unit carrying out work which was not done in other wards.

Heaton and Naomi were also specialist wards (orthopaedic), but they appeared in the lower rank order. Table 5 shows that the average length of stay in both wards was (on the sister's estimate) to be reckoned in months rather than weeks and that the average age of patients in Naomi was likely to be considerably higher than those in Heaton. Both the geriatric units (Ursula and Grace) were ranked low, and the very nature of the speciality was indicative of an elderly patient who stayed in the ward for a long period. When the sister of Grace was interviewed, the ages of patients ranged from 67 years to 97 years and the sister described this as 'typical'.

Peter was a specialist paediatric unit taking children with a limited variety of conditions such as occurred only on Wendy and Frederick, which were both more highly rated. Peter's low ranking could not be wholly explained by the type of diseases from which the patients suffered nor by the type of patient. The learners' perception that there was only 'quite a lot' or, 'hardly anything to learn' must, therefore, be explained with reference to other characteristics.

Analysis of the comments of learners from all the wards (tabulated Table 6, Appendix 6) suggested that their perception of what there was to learn on a ward was influenced by their perception of the variety and nature of the work. The ranking of the wards could also be explained in terms of "mainly technical to mainly basic nursing." Wards being ranked high where learners did a variety of technical procedures and low where they did mainly basic work.

Comparison of the rank order resulting from the responses to question 1, with the rank order resulting from the percentage of learners freely commenting that the work on the ward was 'interesting', or that there was a 'variety of work and learning experiences or a new field' gave a score of 0.732 using Spearman's Rank Order Correlation Test (SROCT), (which is reliable for up to 30 scores; +1.0 perfect positive correlation to - 1.0 perfect negative correlation.) This demonstrated a relationship between the two rank orders which was significant at the 0.01 level. (Table 6) Of the seven high ranked wards (ranked on responses to question 1) apart from the two specialist units (where the novelty of experiences is obvious) there were comments from over 33 per cent of the learners in the other five wards, which indicated that learners found the work interesting, or that there was a variety of work and learning experiences.

"I think this is the best ward for experience I have worked on. The ITU gave a lot of experience. This is a ward for first or second year nurses to gain experience. There were always different kinds of instruments to use and learn. " (First year student)

"The experience was very good on this ward as it was varied" (Second year student).

"In my opinion, I think this ward was a very interesting ward for starters. It was a busy male surgical" (First year pupil).

"There was a lot of variety in the orthopaedic patient". (First year student).

"There was always something exciting and unusual happening" (First year pupil).

"This is a coronary care unit as well as a medical ward and I had the opportunity of learning about cardiac monitoring and emergency procedures. I also saw a few cardiac arrests and this was obviously good experience". (Second year student).

TABLE 6 RANK ORDER CALCULATED ON RESPONSES TO QUESTION 1 COMPARED WITH RANK ORDER PRODUCED BY RANKING WARDS ON PERCENTAGE OF LEARNERS COMMENTING THAT THE 'WORK IS INTERESTING OR THERE IS A VARIETY OF WORK AND LEARNING EXPERIENCES OR IT IS A NEW FIELD'.

Ward	Rank order Question 1	Rank order 'Work interesting/ variety of work and learning experiences/new field	Percentage of learners commenting 'Work interesting/ variety of work & learning experiences/new field	Percentage of learners commenting 'Work monotonous/boring/ repetitive/ basic * nursing
Charlotte	1	4	33	0
Wendy	2	8	19	0
Simon	3	2	39	0
William	4	4	33	0
Neville	4	1	46	0
Frederick	4	7	20	7
Elizabeth	7	3	37	0
Merton excluded because of small sample				
Heaton	8	6	26	11
Irena	9	10	16	4
Naomi	10	9	17	17
Ursula	11	12	10	27
Grace	12	13	8	47
Peter	13	11	14	27

* basic nursing mentioned in unfavourable context.

Further analysis of learners' comments (Appendix 6 Table 6) revealed that with the exception of Frederick ward, there were no comments from the learners in the top seven wards (ranked on question 1), which described the work as 'boring or monotonous'. In contrast, 27 per cent of learners on Ursula (male and female geriatric), 27 per cent on Peter (paediatric ward with limited type of cases), 17 per cent on Naomi (female orthopaedic) and 47 per cent on Grace (female geriatric) found the ward work 'boring, monotonous, repetitive or basic nursing.'

A minority of nurses acknowledged the importance of basic nursing in their training process.

"The routine of the ward was quite good and I learnt quite a lot about basic nursing care, i.e. bed-making, bed-pan rounds, etc. which was valuable experience." (First year student).

"It was a good ward for learning the basic skills and care of patients." (First year student)

But others clearly felt that routine, basic work had ceased to have a place in their learning process and it was a purely 'work'activity.

"The majority of patients were geriatrics so on the whole it was just basic nursing care." (First year student)

"I did not mind doing geriatrics but I did not find it interesting or valuable experience. Every day was more or less the same and the work was just routine. I think that as I met some geriatric patients on a medical ward that my experience on..... ward was unnecessary." (First year student).

"There was very little to learn on this ward. There were hardly any drugs or procedures on this ward to do. After the first week to get to know the routine, it became very boring." (First year student).

"Not a busy ward and not interesting because you wanted to be busy. Not much to learn because the diagnosis is monotonous". (First year pupil).

These data suggest that nurses are socialised to believe that the highly technical procedures are a necessary part of their training whilst the repetitive, basic nursing activities are not. It was clear that learners' perception of what there was to learn, turned on the variety of techniques and procedures that the learners felt were available on the ward.

This is not surprising for the idea was proffered earlier that the training for State Registration and Enrolment follows a 'disease' and 'Task/technique' model with learners being issued with a syllabus and record of experience comprising pages of tasks, techniques and diseases which have to be learnt prior to State examinations. To a student nurse anxious to succeed in her State examinations, a three month spell in a geriatric ward could possibly represent only one question on the examination paper. In such a context, the learner, in selecting a response to Question 1 would respond "There was hardly anything to learn on this ward."

Nurses' Perception of Teaching and Learning

When wards were ranked according to what nurses believed they learnt on wards, Charlotte (female surgical) retained top position, and Peter (Paediatric) and Grace (female geriatric) retained the two lower positions. In the latter two cases, 46 and 38 per cent of nurses said that there was hardly anything to learn on the wards, and 46 per cent, in both wards, said that they had learnt little.

Of those wards which had a mean score of over 2.5 for question 1, Merton (Ophthalmic) and Heaton (male orthopaedic) had the lowest deficit between the two mean scores for questions 1 and 6 (i.e. between what they perceived there was to learn, and what they learnt). Elizabeth and Naomi had the highest deficit.

A learner's perception of what there was to learn on a ward would, in effect, set the limits on her learning expectations, but on the other hand, some learners felt that they could not learn everything which presented itself in every ward. Nurses' comments explained the problem as they saw it. A nurse on Simon (male surgical with ITU - Intensive Care Unit) said, "As this was my first ward, there was such a lot to learn that I just couldn't contain everything I would have liked." Thus, a wide discrepancy

could be due to the learner being a junior nurse on a ward with a vast variety of experiences. However, it was clear from learners' conversations to the researcher after the rating questionnaires were completed that they had other views on the teaching and learning on the ward. For instance one nurse said "You found yourself contradicting yourself filling the questionnaire in. You see there may be 'very much' to learn on the ward, but you may not learn anything because the ward sister doesn't teach you anything."

On two wards, the ward work load was felt to inhibit learning. Elizabeth and Naomi (female surgical/gynaecological and female orthopaedic) had the widest discrepancies between perceived opportunities and what was learnt, and approximately a third of the learners on these two wards commented spontaneously that there was a heavy work load or staff shortage and, therefore, there was no time to teach (Table 5, Appendix 6). "I would have learnt much more but it was very busy and often short of trained staff," was a typical comment. This is a reason which is commonly put forward by ward staff generally, for there being inadequate ward teaching, but in this study these were the only two wards where a high percentage of learners perceived this as the reason for inadequate teaching. Grace (female geriatric), Ursula (male and female geriatric) and William (male surgical) were the only other wards where over 17 per cent of learners commented on "heavy workload/staff shortage/being too busy or having no time." (Appendix 6, Table 6).

With the exception of questions 2 (about consultants) and 7 (about clinical teachers) there was a broad relationship between the responses to question 6 and the other questions, in the sense that the six 'low ranked' wards and eight 'high ranked' wards remained in the upper and lower order. The relationship between questions is readily detected by comparing the charts in Appendix 4.

Ward sisters on the eight top ranked wards (ranked on responses to question 6) received a higher rating for ward teaching when mean scores were calculated for question 4 than the six on the lower ranked wards. The ward sisters with the highest scores (Appendix 6 question 4) were those on Charlotte (female surgical), William (male surgical), Merton (ophthalmic), Neville (male medical), Heaton (male orthopaedic) and Frederick (male, female and children's ENT). The SROCT for questions 6 and 4 gave a score of 0.77 indicating a high positive correlation (significance level 0.01) which suggests that there is a relationship between what nurses believe they learn on the wards and the teaching carried out by the ward sister.

There was also a relationship between the rankings of the ward sisters' teaching and the responses to question 1 (nurses perception of what there was to learn. (SROCT 0.67 significance level 0.01). The sisters on the eight top ranked wards in the rank order derived from responses to question 1, were in the top rank order for teaching, with the exception of the sister on Elizabeth who was ranked tenth (and the ward seventh), and the sister on Heaton was ranked third (and the ward ninth).

However, a word of caution also needs to be introduced since the wording of the question relating to the teaching by the ward sister could have worked against the sisters in the lower rank order, i.e. if learners had said that there was 'hardly anything' to learn on a ward, it might have inhibited them from responding that the ward sister taught 'very many things'. It might have been better, in retrospect, to have phrased the question about ward sister's teaching in terms of 'interest in teaching' rather than amount.

But it was possible to cross-check these data, because in their comments on factors that were 'good for learning' many learners referred to the teaching by the ward sister. There was a relationship between the two rank orders on ward sister's teaching. (SROCT score 0.793 significance level 0.01) (Table 7). The low ranking of five out of six sisters was confirmed. (Ursula, Naomi, Peter, Grace and Irena).

TABLE 7 COMPARISON OF RANK ORDERS FOR QUESTION 4 (WARD SISTERS' TEACHING), PERCENTAGE OF COMMENTS ON WARD SISTERS' TEACHING AND QUESTION 1 (AMOUNT TO LEARN)

Ward	Rank order question 4 (ward sister's teaching.	Rank order from learners' comments on ward sister's teaching.	Percentage of comments on ward sister's teaching.	Rank Order question 1 (amount to learn).
Charlotte	1	6	31	1
Neville	2	5	33	5
Heaton	3	1	67	9
Merton	4	3	50	8
Frederick	5	8	20	5
William	6	2	54	5
Wendy	7	4	36	2
Simon	8	8	20	3
Ursula	9	10	17	12
Elizabeth	10	7	23	7
Naomi	11	10	17	11
Peter	12	14	0	14
Grace	13	12	8	13
Irena	14	13	4	10

When comparing the three sets of data (question 1; what learners perceived there was to learn, question 4; ward sisters' teaching, and comments on ward sisters' teaching) it was interesting to note that five wards consistently remained in the lower order of six (Table 7). These were the two geriatric wards (Grace and Ursula), and two wards which were described

by some of the learners in the wards as being 'like geriatric wards' (Naomi and Irena) and Peter (paediatric). These were the wards on which work done by some learners was described as monotonous/boring/repetitive/basic nursing. These data suggest either that ward sisters on wards where the work is of a repetitive nature, do not teach as much as ward sisters on wards where there is a greater variety, or that the teaching carried out by sisters on wards where the work is of a repetitive nature, is not perceived as 'teaching' or an important part of their training by the learners.

The percentages of nurses commenting favourably or unfavourably on the ward sisters' teaching were high when it is remembered that the learners could comment on anything which was 'good' or 'not so good' for learning, suggesting that learners saw the ward sister as, or expected her to be, a key teacher in the ward. (The sister on Heaton ward (male orthopaedic) was mentioned as 'teaching' or being 'interested in teaching' by over 60 per cent of learners).

But there were other teachers in the ward. Table 1 Appendix 6 shows that 47 per cent of learners on Frederick (ENT) and 40 per cent on Charlotte (female surgery) indicated that 'everyone/staff (i.e. including ward sister and staff nurses) taught or was willing to teach'. On the eight high ranked wards (ranked on what nurses learnt - question 6) a higher percentage of respondents commented that 'everyone' taught, than on the six lower ranked wards.

When these data were analysed using the ward sister's teaching as the reference point, there was a high correlation (score 0.835 SROCT, significance level 0.01) between the rank orders for teaching by ward sisters (question 4) and the rank order produced on the percentage of nurses in each ward, commenting that 'everyone/staff taught or willing to teach' - which were independent of the rating questionnaire.

Four wards (Charlotte (female surgical), Merton (ophthalmic), Neville (male medical) and Heaton (male orthopaedic) remained in the top six of the three rank orders (Table 8). The six lower ranked wards also remained constant (except that Elizabeth moved into seventh place on one ranking, above Frederick and Simon). The lower ranked wards were Ursula (male and female geriatric), Elizabeth (female surgery and gynaecology), Naomi (female orthopaedic), Peter (paediatric), Grace (female geriatric) and Irena (female medical). Appendix 6 Table 2 shows 'staff who did not or were not willing to teach' and the highest percentage of responses of this nature were on Grace (31 per cent), Irena (20 per cent) and Peter (14 per cent). These three wards also had the highest percentage of nurses saying that the ward sister did not teach: Grace (23 per cent), Irena (28 per cent) and Peter (27 per cent).

These data suggest that the teaching in the ward is an activity of the ward sister. It seemed that on wards where the ward sister was teaching or was interested in teaching, that other qualified staff were also teaching and demonstrating interest in teaching; whilst on wards where the ward sister did not teach or show an interest in teaching, other qualified staff tended not to teach or show an interest in teaching.

Learners clearly had expectations that trained members of staff would teach, but on some wards these expectations appeared not to have been met. When commenting on factors that were good for learning, the teachers most mentioned by the learners were the trained nurses and doctors. Only a minority of learners referred to the teaching done by the senior students. (Tables 1 and 2 Appendix 6).

Supervision of new procedures (Appendix 4 Question 5) appeared to be better on the eight high ranked wards (ward sister's teaching and amount learnt). Exceptionally high scores were achieved by Wendy (paediatric), Merton (ophthalmic), Heaton (male orthopaedic) and Frederick (ENT), which is

TABLE 8. COMPARISON OF RANK ORDERS RELATING TO WARD SISTERS' TEACHING AND TEACHING BY QUALIFIED STAFF

Ward	Rank order question 4	Rank order learners' comments on ward sister's teaching	Rank order qualified staff teaching	Percentage comments on staff teaching
Charlotte	1	6	3	44
Neville	2	5	5	33
Heaton	3	1	4	37
Merton	4	3	1	67
Frederick	5	8	2	47
William	6	2	7	25
Wendy	7	4	7	25
Simon	8	8	6	30
Ursula	9	10	11	7
Elizabeth	10	7	13	6
Naomi	11	10	9	22
Peter	12	14	11	7
Grace	13	12	14	0
Irena	14	13	10	16

not surprising since all these wards were specialised units in which new unique procedures were taught. However, Naomi and Elizabeth wards were also specialised units on which a high score could have been expected, but they were also the wards which the nurses believed had heavy workloads which prevented teaching. The scores for this question were generally higher for all wards. Nurses on Ursula (male and female geriatric) and Grace (female geriatric) had some difficulty responding to this question explaining that there were few new procedures to learn. 75 per cent of nurses on Wendy ward

also commented favourably on the strict system of teaching new procedures (Appendix 6, Table 4). Learners were not allowed to do any specialist procedures until they had been taught, supervised and their skills assessed and approved.

It was anticipated when designing the rating questionnaires, that responses to the questions on teaching by clinical teachers and consultants, would not follow the trend of the other responses. However, there was a moderate positive relationship in the rank orders from question 2 (consultants' interest in teaching) and question 4 (ward sister's teaching), (score 0.578 SROCT, Significance level 0.05). The two wards on which consultants received the highest rating (Frederick and Merton) were both highly specialised. The consultants on William ward and their relationship with the patient, were guarded by the sister, (she made this explicit), so this could account for the low score on this ward.

Clinical teachers taught most frequently on Charlotte (female surgery), Simon (male surgery), **Neville** (male medical) and Ursula (male and female geriatric). Nurses on Ursula were particularly appreciative of the clinical teacher, 34 per cent mentioning her teaching in their comments. (Appendix 6 Table 6). A second year student made this comment of Ursula ward "Not everyone would gain from working here, but I felt that I did. Realised that there was more to geriatric nursing than I thought originally. The clinical tutors were very helpful and taught me a great deal." 13 per cent, 16 per cent and 14 per cent of nurses on Elizabeth, Naomi and Peter, which were all low rated, said that they would have liked more contact with the clinical teacher.

Responses to question 8 (Appendix 4) showed that the highest rated wards when compared with others were Heaton, Simon, Charlotte and William. These were all surgical wards, and all but Charlotte were male wards. Heaton was ninth ranked on learner's perception of what there was to learn (question 1

but was consistently in the top three places for teaching/interest in teaching by the ward sister and other qualified staff. Simon was ranked third for question 1 and was a high technology ward. It appeared in the mid-rank order for teaching and interest in teaching. Charlotte was a female surgical ward, ranked first for question 1, and high for teaching and interest in teaching by ward sister and qualified staff. William was also a male surgical ward with reasonably high ranking for teaching by the ward sister and qualified staff.

These four wards were also the wards on which learners liked working the most. (Question 9). For both questions the eight high ranked wards remained in the upper order. Irena (female medical), Naomi (female orthopaedic Peter (paediatric) and Grace (female geriatric) emerged as the four least popular wards, and the four wards which compared least favourably with others. Although patients tended to be elderly and female on three out of the four wards, the only common characteristic which emerged was that all four wards were persistently ranked low for teaching by the ward sister and other qualifie staff.

Overall, it appeared that learners liked working on wards on which there was a variety of work and, comparing speciality with speciality, they preferred wards on which the patients were male.

Further analysis of nurses' comments provided tentative reasons for answers to the specific questions on the questionnaire. Four wards were commented on for having heavy workloads/staff shortages/no time. (Appendix 6 Table 6). These were Elizabeth (43 per cent), Naomi (42 per cent), Ursula (27 per cent) and Grace (23 per cent). However, as already mentioned, this was only offered as a reason for inadequate teaching in Elizabeth (33 per cent) and Naomi (31 per cent). There were no comments from nurses on any of these four wards which indicated that there was spare time which could have been used for teaching (Appendix 6 Table 5).

Nurses on Wendy (25 per cent) and Peter (27 per cent) indicated that spare time was available on these two wards but that it was not used for teaching or learning. (Appendix 6 Table 5). In addition to these comments concerning lack of teaching due to heavy workload, and spare time not being used for teaching, over 25 per cent of nurses on Elizabeth (27 per cent), Irena (32 per cent), Naomi (25 per cent), Peter (34 per cent) and Grace (54 per cent) indicated that teaching on these wards was infrequent or inadequate or that there was no interest in teaching learners. These five wards had the highest percentages of negative comments on teaching recorded against them which tended to confirm the low ranking. Ward sisters on these five wards were given the lowest rating by learners on question 4. Ursula had fewer negative comments on teaching recorded than either Wendy (paediatric) or William (male surgical) due, it seemed, to frequent visits from a clinical teacher who was seen as a key figure in the ward by a third of the learners.

Learners on Ursula also seemed to be keenly aware of their patient's needs. There were more comments expressing dissatisfaction with patient care from learners on Ursula than on any other ward. (Appendix 6 Table 7). The categorisation was made to distinguish between factors within and without the ward staff's control. 30 per cent of comments concerned factors within the ward staff's control and 22 per cent concerned facilities such as overcrowding, lack of occupational therapists and equipment, which were external factors. The nurses in this geriatric unit were aware of the patients as people rather than 'work objects'. They commented on the need for patients to be spoken to and 'made interested in life once again', and clearly wanted changes made which would benefit the patients.

> "The staff didn't really care what happened as long as the patients were washed, dressed and sat out. The patients were treated as vegetables rather than humans." "Not enough was done to interest the patients. When ideas were suggested by the students of ways to improve things there was always some reason why it could not be done."

The interesting question regarding Ursula was "Who moved away from the

traditional 'disease model' and made the learners aware of patients as people" The answer would seem to be the clinical teacher and the ward sister; for the former was seen as an important teacher in the ward and it seemed from learner's comments that the sister operated a system of 'total patient care' with each learner responsible for the total care of 4 or 5 patients as opposed to carrying out a series of disjointed tasks. These, of course, can only be tentative conclusions.

Six wards were described as 'well organised' by over 20 per cent of the nurses - these were Heaton (48 per cent), Simon (33 per cent), William (25 per cent), Wendy (25 per cent), Neville (21 per cent) and Charlotte (20 per cent). Elizabeth and Naomi were described by 27 and 19 per cent of the learners as 'not well organised' - these were the wards with the heavy work loads. The meaning which learners attached to the concept 'well organised' was not well defined. For instance, Simon had a work book in which was prescribed the work for each learner on a job basis. The sister on Charlotte, however, prescribed the care for each patient, but expected learners to observe the patients and decide for themselves which job was to have priority. The meaning which learners attached to the concept 'well organised' was therefore uncertain; it could refer to the style of management, the job allocation or to a rigid routine.

28 per cent of the learners on Charlotte made favourable comments about the responsibility they were given in carrying out patient care. But on low rated Peter 27 per cent of the learners were critical of the absence of responsibility.

'Staff relationships/ward atmosphere' were mentioned by many nurses in both favourable and unfavourable context. They appeared to be particularly important to learners who did not like a ward, so data from these learners were analysed separately and are discussed later. (p 106). Four wards - Charlotte (female surgical), Neville (male medical), Heaton (male orthopaedic) and Frederick (ENT) were described by over 33 per cent of the learners as having 'good staff relationships/ward atmosphere'. (Table 9). Heaton was mentioned by 59 per cent of learners. These findings appeared to the

TABLE 9 PERCENTAGE OF LEARNERS COMMENTING ON STAFF RELATIONSHIPS AND WARD ATMOSPHERE

	N.	Percentage of comments on good staff relationships/ward atmosphere	Percentage of comments on poor staff relationships/ward atmosphere.
Charlotte	25	33	8
Wendy	16	6	31
William	24	21	8
Simon	30	24	0
Neville	24	46	13
Heaton	27	59	4
Frederick	15	40	7
Elizabeth	30	20	10
Irena	25	12	36
Ursula	41	29	5
Naomi	36	14	19
Peter	15	17	20
Grace	13	23	0

researcher to be findings of great importance, for apart from Merton which was excluded from the analysis of comments because of the small sample, all the wards, which were consistently in the top five positions in the rankings for ward sister's teaching (question 4) and teaching by other qualified staff (see Table 10) emerged in the top four places for 'good staff relationships and ward atmosphere', suggesting that there was a difference in the behaviour of the permanent staff in wards where the ward sister and qualified staff taught and showed an interest in teaching,

and those that did not. The same comments made by the learners could not be categorised in both 'teaching and interest in teaching' and 'staff relationships' so there was no error in the coding procedure which could account for this relationship. There was a positive correlation between the rank orders from question 4 (ward sister's teaching) and the rank order from learners' comments on 'good staff relationships/ward atmosphere' (Score 0.698 SROCT Significance level 0.01).

Wards least mentioned in a favourable context were Wendy (paediatric) and Irena (female medical). These two wards also had the highest percentage of learners (31 per cent and 36 per cent respectively) commenting unfavourably on 'staff relationships and ward atmosphere' (Table 9). The unfavourable staff relationships on Wendy did not appear to have affected the job teaching since Wendy received an extremely high rating for one aspect of this - the supervision of new procedures.

Irena on the other hand appeared consistently in the lower ranking for ward sister's teaching and 'teaching or interest in teaching' by the other qualified staff and it emerged as a ward on which learners' needs were not met.

The 'staff relationships and ward atmosphere' appeared to be independent of the type of ward and work activities.

Table 10 showing the rank orders of the ward sister's teaching (calculated on question 4 which was independent of the comments) and the rank order calculated on comments concerning 'good staff relationships/ward atmosphere', for the first time Grace ward moves up. (At interview the sister said that she liked to keep the atmosphere 'light') The other geriatric ward Ursula also received a moderately high ranking.

TABLE 10 COMPARISON OF RANK ORDERS RELATING TO WARD SISTERS' TEACHING, "STAFF RELATIONSHIPS/WARD ATMOSPHERE" AND TEACHING BY WARD STAFF

Ward	Rank order ward sisters' teaching (question 4)	Rank order from learners' comments on'good staff relationships/ward atmosphere	Rank order from learners'comments on qualified staff teaching.
Charlotte	1	4	2
Neville	2	2	4
Heaton	3	1	3
Frederick	4	3	1
William	5	8	6
Wendy	6	13	6
Simon	7	6	5
Ursula	8	5	10
Elizabeth	9	9	12
Naomi	10	10	8
Peter	11	10	10
Grace	12	7	13
Irena	13	12	9

There was a moderate relationship between the rank order for question 9 (liking the ward) and the rank order from comments on 'good staff relationships/ward atmosphere'. (SROCT test 0.64. Significance level 0.05). However, learners who did not like working on wards related their dislike to 'poor staff relationships and ward atmosphere ' and a disinterest in their needs as learners.

Learners who did not like working on a ward.

327 rating questionnaires were completed and in only 27 of these had nurses made the response, "I did not like working on this ward." (8 per cent). During the card sorting, it became apparent that nurses were not making this response because they did not like the hard work or the monotonous repetitive work. They explained their dislike of a ward in terms of 'staff relationships and ward atmosphere'.

6 nurses (22 per cent) described the work that they did as 'not interesting, boring or repetitive', whilst only 1 (4 per cent) described it as 'interesting or varied'. 3 nurses (11 per cent) who all came from the same ward, commented on the 'lack of responsibility'. 7 nurses (26 per cent) commented on the 'heavy workload or staff shortages'.

However, analysis of the comments on 'ward atmosphere and staff relationships' confirmed that these were one of the main reasons for nurses disliking a ward. 20 nurses (74 per cent) complained of poor staff relationships. It was also interesting to find that 23 (85 per cent) also complained of inadequate teaching or disinterest in teaching learners. Only 4 nurses (15 per cent) linked the inadequate teaching or disinterest in teaching learners to the staff shortages.

The comments of these nurses suggested that what nurses learn on a ward is affected by the attitude of permanent staff towards them. In one ward in particular, these seemed to be an unhelpful attitude towards the learners, which seemed to indicate that the learners were perceived as 'workers' rather than 'learners'.

One nurse commented, "At the time of being on the ward, there were too many trained staff, therefore, there was an undercurrent and at times it was unpleasant for student and pupil nurses. The trained staff only seemed keen to get the work done and not to help or teach the training nurses'.

Another nurse said, "The sister on this ward did not lecture us. The trained staff on this ward at that time did not bother with us first years. Most of the time they were in the office when you needed them. When there was a new procedure, you always had to manage yourself or ask a third year nurse. The clinical teacher was helpful with us first years".

Another nurse had obviously considered giving up nursing. "I think this ward was dreadful in every way. I don't think I have one good point to say about it. The staff never seemed interested in teaching us anything, only being sarcastic, snappy.... I was very depressed all the time I was on the ward. There were many interesting things to learn but we had to do everything ourselves. I didn't like to ask questions especially to one member of staff for fear of being snapped at..... I seriously thought I should never have started nursing in the first place."

These three comments were typical of those of many of the nurses on this particular ward. The majority of nurses commenting were in their first year. On other wards there was a convergence of the two categories (poor staff relationships and lack of teaching). There was less hostility towards learners and what could best be expressed as complete disinterest in the nurse either as a 'worker' or a 'learner'.

"I would have enjoyed working on the ward but one was usually left to get on with things and was rarely shown how to do things.... The sister and staff nurses were very 'clicky' and did not like being disturbed and they could not be bothered. I found I lost interest because of a lot of little things", wrote one learner.

Other nurses commented in similar vein. "One of my reasons for disliking this ward so much was because no one had any time for the first year nurse. They seemed to think our duty was just to fetch bed-pans and to do pressure areas. The sister and staff nurses were rarely found in the wards and nothing was organised. You had to find things and do things to the best of your ability without any tuition."

"This ward was very busy for nine tenths of the time and learning was quite difficult for me being my first ward. Understanding, help and encouragement was little, being so new to nursing."

"Some more senior nurses take advantage of us (new nurses). Sister appeared to be very busy all the time and we did not get much teaching from her."

These comments from learners who did not like the wards show how the learners were prevented from seeking assistance by the response they anticipated they would get. Contrast these comments with those from learners on wards which were described as having a 'good ward atmosphere'.

"The sister on the ward was always very patient and always seemed to have lots of time for any queries or worries I had."

"I really liked this ward. The sisters and other qualified staff were really helpful and patient..... It really had a great atmosphere and you were never scared to ask for help. A really first class ward and staff."

"I loved working on this ward very much indeed. Everybody was very helpful and there was always somebody to help or advise on anything that you weren't sure about."

"If you ever had a problem sister was always willing to listen to you and try to help you."

These data suggest that there are ward learning environments where teaching is given in an atmosphere in which the learner feels free to seek help and knowledge; and there are also wards where there is a minimum of teaching; and where this is accompanied by poor staff relationships, the learner does not feel that she can ask questions or seek help.

The Perception of Junior and Senior Learners.

Since the sample of learners included fewer senior students compared with other groups, it was necessary to compare scores from the differing groups of learners to detect any trends which may have been more apparent if the sample had been more balanced. Appendix 5 shows the mean scores for each ward for learners of differing years. It is difficult to draw any firm conclusions because of the small sub-samples but there was a surprisingly high level of agreement between the various groups. However, on Frederick ward there appeared to be a marked difference in the perception of the learners. The second and third year learners believed that there was more to learn and felt that they had learnt and were taught more by the ward sister than the more junior nurses had. Comments by first year nurses, indicated that they believed that they did not learn much because, unlike the more senior students, they were not allowed to take part in much of the specialist work. 27 per cent of nurses on Frederick ward said that they did not have the opportunity to watch or perform a variety of jobs. The hierarchical allocation of jobs meant that junior nurses repeatedly did the same type of work.

Table 11 shows the results of the Spearman's rank order correlation tests for all the questions in the questionnaire, when the rank orders produced from the responses of first year students and pupils were compared. It can be seen that there was positive correlation for all the rank orders: the level of significance being 0.01 for all except three questions, suggesting that there were similarities in the socialisation of the first year students and first year pupils.

Table 12 shows the results of the Spearman's rank order correlation tests on the rank orders produced from the responses of first year students and second and third year students. In this case there was positive correlation at the 0.01 level of significance on two key questions;

question 4 (perception of the ward sister's teaching) and question 3 (perception of the benefit other learners would gain from working on the ward). There was thus, a significant level of correlation in the responses of all the learners on the teaching carried out by the ward sisters and what was, in effect, an assessment of the ward as a working/learning environment.

It is interesting to note that there was no significant correlation in the rank orders resulting from the responses to question 2 (consultants' interest in teaching learners), question 5 (supervision of new procedures), question 8 (comparison of wards) and question 9 (liking wards) suggesting that there may be important differences in the perception and experiences of junior and senior students. However, it must be stressed that some of the ward samples were very small for specific sub-groups and results must, therefore, be treated with caution. When studying the charts in Appendix 5 the reader is, therefore, advised to note the sample size, especially when there is marked discrepancy in results.

TABLE 11. THE RELATIONSHIP BETWEEN RESPONSES FROM FIRST YEAR STUDENTS AND FIRST YEAR PUPILS.

Question		rho	level of significance
Q.1.	There was very much (hardly anything) to learn on this ward	+0.652	0.05
Q.2.	Some consultants were very interested (the consultants were definitely not interested) in teaching nurses.	+0.636	0.05
Q.3.	I think all (not many) learners would benefit from working on this ward.	+0.815	0.01
Q.4.	The ward sister taught me many things (hardly taught me anything).	+0.782	0.01
Q.5.	There was always someone (rarely anyone) to supervise new procedures.	+0.757	0.01
Q.6.	I learnt very much (little) on this ward	+0.77	0.01
Q.7.	Clinical teachers taught frequently (never taught) on this ward.	+0.734	0.01
Q.8.	This is the best (one of the worst) wards I have worked on.	+0.745	0.01
Q.9.	I liked (did not like)working on this ward	+0.689	0.05

TABLE 12. THE RELATIONSHIP BETWEEN RESPONSES FROM FIRST YEAR STUDENTS AND SECOND AND THIRD YEAR STUDENTS.

Question		rho	Level of significance
Q.1.	There was very much (hardly anything) to learn on this ward	+0.622	0.05
Q.2.	Some consultants were very interested (the consultants were definitely not interested) in teaching nurses	+0.259	N.S.
Q.3.	I think all (not many) learners would benefit from working on this ward	+0.741	0.01
Q.4.	The ward sister taught me very many things (hardly taught me anything)	+0.86	0.01
Q.5.	There was always someone (rarely anyone) to supervise new procedures	+0.189	N.S.
Q.6.	I learnt very much (little) on this ward	+0.703	0.05
Q.7.	Clinical teachers taught frequently (never taught) on this ward.	+0.923	0.01
Q.8.	This is the best (one of the worst)wards I have worked on.	+0.336	N.S.
Q.9.	I liked (did not like) working on this ward.	+0.392	N.S.

N.S.= Not significant at 0.05. level.

Summary of Findings

The rating questionnaire responses enabled wards to be ranked. Characteristics which tended to place wards in the higher rank order were:

Variety of patients with different diseases;

Variety of tasks and techniques;

High turnover of patients;

Teaching by the ward sister;

Teaching by all staff;

Good staff relationships and ward atmosphere.

It will be remembered that in Chapter 4 a working hypothesis was formulated that -

Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality.

Data from the first stage of the research gave tentative support to this hypothesis, enabling it to be carried forward to the second stage. The results also led to more detailed working hypotheses, some of which informed the second stage. (They could also form the basis of future studies into nurse education in the ward).

Working Hypotheses.

1. Nurses' perception of what there is to learn on the ward follows a 'disease, task/technique' model, with wards on which there is a good variety of diseases and techniques in the high rank order, and those on which there is a limited number of diseases and techniques, in the lower rank order.

2. Nurses' perception of learning opportunities on a ward is related to the turnover of patients in the ward; nurses perceive that there is more to learn on wards where patient stay is short.

3. A heavy workload is a factor which may inhibit ward teaching.

4. There is a relationship between nurses' perception of what they learn on a ward and the teaching done by the ward sister.

5. There is a relationship between the variety of diseases on a ward and the teaching done by the ward sister.

6. There is a relationship between the teaching done by the ward sister and the teaching carried out by other qualified staff members.

7. There is more job teaching and supervision of work activities on wards where specialist techniques are practised, than on wards where techniques and nursing practices are of a general nature.

8. There is a relationship between the teaching done by the ward sister and the teaching done by consultants.

9. Basic nursing activities are perceived as 'work' rather than 'learning' activities.

10. Nurses like working on wards which have good staff relationships and ward atmosphere, and where there is an interest in teaching learners. Male wards are more popular than female wards, and surgical wards are more popular than medical and geriatric wards.

11. Poor staff relationships and inadequate teaching are the two main reasons for learners' dislike of wards.

12. There is a relationship between the teaching by the ward sister and the interactions between permanent staff and learners which demonstrate an interest in the learners and their learning needs. Learners perceive that there is a good ward atmosphere on wards where the ward sister teaches.

13. On wards where the concept of 'total patient care' is practised, learners do not perceive the patient as a 'work object'.

CHAPTER SEVEN

THE CHARACTERISTICS OF A GOOD WARD LEARNING ENVIRONMENT: AN IDEAL TYPE CONSTRUCTED FROM LEARNERS' OPINIONS

The comments that learners made on what was 'good for learning' and 'not so good for learning' implicitly or explicitly identified the needs of individual learners, and demonstrated ways in which perceived needs were met, on the one hand, and left unsatisfied, on the other. The characteristics of an 'ideal' ward learning environment were derived entirely from these comments.

Cards from within specific categories (e.g. staff relationships and ward atmosphere) from all 14 wards (see Appendix 6) were collected and re-sorted and the characteristics of an ideal type derived from the sub-categories which emerged. (In the interests of clarity the characteristics are listed under three main headings in this chapter, followed by a discussion and presentation of supporting data).

A good ward learning environment is seen as a ward in which the needs of learners are met. Some characteristics, such as a good variety of patients with different diseases and a high turnover of patients, which give rise to a variety of work activities that are perceived as 'interesting', are outside the control of the ward sister and will not be discussed here, but others clearly fall within her sphere of influence.

The characteristics of a good ward learning environment are associated with three main types of activity which the ward sister can undertake to change a working environment to a learning environment: the provision of a ward atmosphere which is conducive to learning, formal teaching and the provision of learning opportunities.

The Provision of a Ward Atmosphere which is Conducive to Learning

A ward atmosphere which is conducive to learning is created by the ward sister and other permanent ward staff who are under her control. Essentially, it originates from the relationships that develop between the trained nurses who are permanently assigned to the ward and the transient learner/workers, and the measures that are taken by the trained nurses to reduce the social distance between the two groups; but it also encompasses relationships between staff and patients.

The characteristics of a ward atmosphere which is conducive to learning can be summarised as follows:

The sister and trained nurses

- show an interest in the learner when she starts on the ward.
- ensure good learner/staff relationships
- are approachable, available, pleasant, yet strict.
- promote good staff/patient relationships and quality of care.
- give support and help to learners generally.
- invite questions and give answers.
- help and encourage the learner in her work.
- work as a team.

Underlying many of the learners' comments was the insecurity and anxiety that students and pupils experienced during their ward assignments. There was an expectation that, when they felt the need for help and support, the sister and trained nurses would be available to assist them. The anxiety was particularly marked when they started work on a new ward.

"When I got on the ward for the first time there was someone qualified to explain to me what to do and what not to do..... I consider this very necessary for I had no idea and, in fact, I could have done more harm than good."

But the needs of newly arrived learners were not always met, and one first year student who had previously worked on medical, surgical and geriatric wards, experienced what could be described as a state of 'anomie' in the sense that she did not know what the norms were in the new environment.

"When I first started, there I was on my own. Nobody told me or helped me on my first day there. It was the worst day of my life."

And a nurse on her first ward found little support

"Understanding help and encouragement was little being so new to nursing."

Whether or not learners subsequently sought or received help appeared to depend on the 'availability' and 'approachability' of the sister and trained nurses. Learners were particularly sensitive to the behaviour of the sister, feeling that her attitude towards them affected what they learnt, and also their work.

"The sisters were like friends and we had a great time. You can ask them anything and they would be ready to help".

"The relationship between sisters and nurses was very good as nurses learnt more when they felt they could approach the sister."

"There was a good student/sister relationship on this ward and this contributed to the friendly atmosphere and thus one felt more conducive to working well and thoroughly."

But on some wards the sister's behaviour and lack of approachability appeared to inhibit learning.

"The atmosphere produced by an extremely domineering and stubborn sister was wrong for learning and working."

"The sister's attitude made it difficult for anyone to ask her about the ward at first. But once used to her ways she helped a lot. But I think it shouldn't be - to have to break through a barrier and once your face doesn't fit being nasty to you or your friends."

"I didn't mind working when the sister wasn't there. She made everyone nervous.... If the ward had a different sister I probably wouldn't mind working there again."

Learners welcomed friendly relationships between the two groups, but some did not want discipline to be abandoned to the detriment of patients. The relationships on one ward were described approvingly as 'pleasant, yet strict', but a learner on another ward felt that "there was a relaxed attitude and this encouraged bad habits." Nurses expressed disapproval when they encountered what they believed were poor standards of care.

"I found nursing care was poor. My impression was that they are slapdash and although very busy I feel that there are certain things one has to do for the sake of the patient and to cut down the risk of infection."

The trained nurses, particularly the sister, were the nurses who determined the standard of care on a ward, and their relationships with the patients were also noted by the learners.

"The atmosphere was good and stimulated your interest in the patients."

"The sister really made sure all her patients got the best attention and nursing care, and that practical procedures were done properly."

"Tender loving care and personal contact was encouraged."

"The sisters took a keen interest in all patients and were very kind to them."

Demonstrating an awareness of patient's emotional needs, learners were critical of some staff/patient relationships and of attitudes which prevented patients approaching the sister or trained nurses.

"You were never allowed to sit down to talk to patients. The sister said that it was not the nurse's job to become involved with patients' emotional problems and talking only encouraged them."

"The sister did not have a friendly approach to the patients. The patients were very frightened of the sister and would not confide in her, they knew she was efficient but they never could talk to her as a person, but I don't think she realised this."

"The staff nurse had a very abrupt manner to patients and students."

Thus, the atmosphere on the ideal ward is one in which learners feel that some consideration is given to their own needs and those of the patients; a ward in which, to quote one learner, the "sister is dedicated towards the patients and nursing staff."

On some wards the trained nurses seem to be readily available to support the learners and it was clear that learners felt that they could approach them for assistance.

"The trained staff on this ward were very helpful. Sister was excellent if you were worried about anything."

"The nursing staff helped to make the pupils feel confident."

In such an environment, learners felt that they could ask questions without fear of ridicule or rejection.

"Whenever we asked a question we were always given such a detailed answer which was so helpful."

But learners on other wards were less fortunate and found themselves segregated from the trained nurses who tended to remain in the office.

"Sister stayed in her office most of the time."

"The sister and staff nurses were rarely found on the wards."

"The sister was rarely available to answer questions."

Whilst the office door could create a physical barrier between the trained and learner nurses, there were other less tangible barriers which inhibited learners and learning.

"Staff nurses tended to be aloof."

"If you asked a question of certain staff, they laughed at you. I didn't learn because I was afraid to ask."

"Whenever I asked a question I was told to look it up."

Learners felt a need for help in their role as 'worker', with an interest being shown in them as individuals and not only as the means of getting the work done. This did not always happen.

"Nobody was really interested in the nurse's work or in the nurse as an individual."

"One can lose interest as your work is very rarely praised and little encouragement is given."

"I learnt a lot by my mistakes on this ward, whereas on other wards I was left alone most of the time and did not know whether I was correct or incorrect in what I did."

Positive help and correction of mistakes were welcomed. But when criticism was given in what a learner believed was an unhelpful manner, this could cause tension.

"If new nurses did anything wrong instead of showing them the correct way, she would report them to sister."

"As a result of the tension on the ward, I lost confidence in myself. The staff was very critical and it put me off."

"The senior staff were not very helpful at all, unless you rarely happen to work with them. And then you would only get shouted at and told never to do a 'thing' wrong again."

Ideally learners wished to work in an atmosphere which was free of tension; what one learner termed a 'team atmosphere'. Typically learners commented that the "ward sister and staff were a pleasure to work with" or "All the staff got on well together." Paradoxically, in a situation which could have favoured increased teaching - a surfeit of trained nurses - learners reported increased tensions.

> "The trained staff worked against one another, so as a student you were pulled two ways."
>
> "Too many bosses could end up in conflict of instructions."
>
> "Also, there were in my opinion, too many trained staff which often caused an atmosphere as they all wanted to be in charge."

Being part of a team, meant that learners were treated with respect and accepted by the members of staff who worked permanently on the ward.

> "The atmosphere on the ward was very good. I found everyone helpful and cheerful and the days were often hectic, but everyone was treated with the same respect whether you were a first year or a third year."

Exclusion from the 'team' or club of permanent staff meant that learners felt that they were "treated second rate to permanent staff - irrespective of status."

Thus the keynote of a ward atmosphere which is conducive to learning is 'teamwork', for such a term includes comradeship and mutual assistance, and precludes the segregation of the permanent staff from the learners.

Formal Teaching

Formal teaching on the ward includes all those activities in which skills or knowledge are transmitted from someone who can be identified as a teacher, to the learners. The teaching described by the learners could be divided into two types which were described by Bendall (1973): "'non-job teaching' - discussion of the patient's diagnosis, treatment and needs outside the immediacy of the routine," and "'job instruction' - instruction as to some detail of the job currently being done" (p. 37).

The characteristics which are concerned with the formal teaching on the ideal ward are:

All trained nurses on the ward teach regularly.

'Outsiders' teach regularly, i.e. doctors and clinical teachers.

Senior students teach.

Trained staff assess learners.

Non-job teaching comprises lectures and discussions about patients.

There is a programme of job instruction.

Sister maintains good communication with the staff and learners.

Trained nurses teach during the drug round.

Trained nurses teach 'by example'.

Sister initiates teaching.

Two essential features of the teaching on the ideal ward are first that there is a variety of trained teachers and second that teaching is a frequent occurrence and is included in the ward routine.

Learners' comments showed that they expected the sister and trained nurses on the ward to teach, but on wards where teaching was given low priority by permanent staff, teaching was irregular and often initiated by learners.

"I would have liked the sisters to go around the patients with you and give lectures, but one is left alone to get on with it."

"I did not really think that the trained nurses thought it their job to teach new students."

"I don't think the sister and staff nurses really pushed nurses hard enough to learn, i.e. they don't particularly give lectures daily, only when it is necessary or when there is time."

"No one seemed to want to teach you unless you asked."

In contrast, on wards where the sister gave teaching high priority, specific times were set aside and teaching was given regularly.

"The staff nurses and sister on this ward always gave us at least three lectures a week. The topics they chose were interesting and valuable in the understanding of orthopaedics."

"It was a very good ward to work on. We always had lectures on different diseases and that brightened most of us."

Learners were appreciative of the teaching they received from the clinical teachers and doctors, particularly when it was done on a regular basis. These trained members of staff were 'outsiders' in the sense that they worked in other areas of the hospital and visited wards intermittently.

"We always had lectures from the doctors and consultants which I like because I learn a lot from them."

"The consultants are very keen to discuss the patients' condition and the doctors show you how to do procedures."

"The clinical teacher also was most encouraging and I learnt a lot more about drugs and looking after very ill people."

"A clinical tutor came every Wednesday and was quite helpful in making one realise that the old ladies needed love and affection and care upon lifting and toiletting."

A variety of teachers meant that the learners were taught more frequently than if they had had to rely on a sole teacher. Tutors and clinical teachers were missed particularly on wards where the permanent staff did not teach, but infrequent visits meant that learners had little contact with them during a ward allocation.

"I never had a lecture on this ward and never saw a tutor except for my assessment."

"The clinical teacher was excellent but I only worked with her twice during my stay."

In addition to the statutory assessments, some teachers in the ward also assessed learners informally to ensure that they understood what had been taught.

"The consultants were interested in us too. Asked us questions and made sure we understood."

"I found it helpful at visiting times. We were allowed to go into the treatment room and have tests on different things in the ward or we could discuss one particular patient and his treatment."

"The qualified staff were interested in teaching juniors. Their method of teaching was good, i.e. if ever there was an unconscious patient on the ward the staff nurse would first explain the nursing care of this patient and a few days later she got us to write about it. This was done with various conditions concerning the patients."

In addition to the trained members of staff, senior students also taught. One learner felt that they were more approachable than the trained nurses.

"At the time I worked on this ward, there were several finalists, some of whom were very enthusiastic about teaching new students."

"Third year students showed junior students new procedures which in my case helped a lot as one felt better able to question other students rather than qualified staff."

As with the non-job teaching - the lectures and discussions - the job instruction given by the sister and staff nurses, clinical teacher and doctors also took place regularly according to a planned programme.

"It is a relief to go there and find that everything is taught simply from the beginning and is supervised to a proper programme of work."

"Sister and staff nurses are always teaching because they think it is essential for us to learn before we put it into practice."

"The sister never allows you to do new procedures before she is confident that you are competent."

It was lack of supervision or teaching rather than the supervision that caused tension and anxiety.

"Sometimes you are asked to do something you have never done before and are expected to get on and do it with no supervision."

"The only thing I disapproved of was the way you were just given an injection to draw up and give it. You were always left entirely on your own and no-one checked that you drew up the correct amount. If it was a D.D.A. (Dangerous Drug Act) you just signed the book and went and gave. I think they should have been more strict on this kind of thing."

Some learners found that they were unable to undertake a variety of duties because they had not been taught how to do specialist work, and were, therefore, restricted to simple duties.

"Each new thing was first to be shown and explained to you. Second you do it under supervision and third you are watched doing it yourself. But because of this stipulation sometimes you missed out on learning, i.e. when the ward was short staffed. Those who were competent and quick did all the specialist procedures - and one only has so much time on each ward."

Learners were anxious not to make mistakes which would affect the patients and considered good communication between sister and learners to be essential. They required a free flow of both 'knowledge' and 'information', and therefore welcomed comprehensive ward reports from the sister or nurse in charge. (Knowledge being defined as 'facts which derive from a body of nursing, medical or related theory', and information being defined as 'facts which are concerned with day to day activities'.)

"The sister always explained new cases during report which was of a great help."

"One knows what is going on all the time.. Good communication between sister and junior nurses."

Sometimes, learners did not receive a report and were, therefore, deprived of both knowledge and information or they received what they felt were inadequate reports.

"Often scanty reports lead to mistakes in nursing and treatment. Students told only what they 'ought to know'."

"We never got a report all day."

"Students not always informed of patient's condition, change of medicine, etc."

Trained nurses on some wards passed on knowledge about drugs during the drug round and learners took the opportunity to ask questions.

"The nurse administering drugs took a junior nurse and taught her on the drug round."

"Students usually did one drug round a day with a member of the service staff enabling them to answer any questions."

However, on other wards the drug round was a high status activity in which learners did not always participate.

"I wasn't given the chance to give many drugs out."

"I never did a medicine round unless I grabbed the trolley first."

There was some evidence to show that the sister and trained nurses set an example to the learners even though they may not have been actively teaching; what could be termed 'teaching by example'. It was clear that the learners noted how the trained nurses approached and related to the patients (p. 118), and it seemed that learners could also benefit by working with trained nurses and watching them as they administered care.

"The sister showed a very good example to nurses by her care and attention to geriatric patients."

"The sister set an example by working alongside nurses on the ward."

"I found the trained SENs of more value in simple bed-side nursing than SRNs."

But some sisters and trained nurses restricted their activities to issuing instructions and working away from the bedside.

"Once introduced to the ward, the sister gave us an instruction of what she wanted done in her ward and the way to treat patients. After that we hardly saw her to teach us."

"The sisters hardly came out on to the wards."

Ideally, learners not only wanted the trained nurses to work with them and teach them how to do the work, they also wanted them to pass on knowledge and explain why the work was done in a particular way.

"The sister would explain and show you all the practical procedures."

"They hardly ever explain why certain procedures are carried out."

The sister's teaching role extended beyond the actual teaching she gave, for she was instrumental in encouraging other members of staff to teach. She could be particularly helpful in persuading consultants and doctors to pass on their specialised knowledge. This was important since learners felt unable to approach consultants, and relied on the sister to enlist their help.

"Consultants always gave lectures to us most afternoons and the ward sister would ask him if he didn't."

"The sister is interested in teaching us. She sometimes got a doctor to lecture us."

"Sister encouraged the registrar and housemen to lecture us."

"The consultants could have been encouraged more to help student nurses about the signs and symptoms of diseases."

Sisters also encouraged the learners themselves to teach their peers.

"The ward sister always picked out one nurse and told that person to talk about a disease to the rest of us."

"Teaching was encouraged. Often lectures from students taking their finals."

These data suggested that it is the sister who determines the place of teaching in the rank order of priorities. In the ideal ward, the sister ensures that teaching is carried out by according it a place in the routine and enlisting the services of a variety of teachers. She is an 'initiator of teaching', as well as a teacher.

Provision of Learning Opportunities through the Ward Organisation.

The sister is the manager in the ward and through the ward organisation is able to provide learning opportunities for the learners who work on her ward.

Characteristics of the learning opportunities which are provided through the ward organisation are:

Everybody works.

Sister and trained nurses give learners the opportunity to watch or perform new procedures.

Sister accords teaching and learning activities a place in the routine.

Sister allows learners to go on doctors' rounds.

Sister gives learners the opportunity to read case notes and text books.

Sister gives learners responsibility.

The ward sister controls the permanent trained nurses and auxiliaries, and learners who work on the ward, and is able to create a learning environment by placing learners in work situations, which satisfy their learning needs. Of key importance is the way she allocates the work, for traditionally work in hospital wards has been allocated on a hierarchical basis with learners doing the bulk of the routine work and trained nurses doing the more technical tasks, but learners in the first stage of this study did not feel that this type of work allocation was good for learning.

It was evident that learners wanted the trained nurses not only to share the workload, but also to give them an opportunity to participate in work which was usually monopolised by the trained nurses.

"Everybody contributed to working out the workload and not just the less senior nursing staff."

"The qualified staff allowed one to do procedures one hadn't done before."

"You did most of the treatment necessary for each patient on your side of the ward, so that if dressings, removal of stitches, etc., needed to be done no one else but you did it."

"When any new procedures were undertaken students were always given the opportunity to watch and help if they wanted to."

It seemed that on some wards the trained nurses left most of the work to the learners.

"It always seemed to be the same nurses who had to do 12 big heavy baths every morning a lot of the time while other nurses messed around for the rest of the time."

"I didn't care for this ward as the senior staff were not really prepared to do any of the work."

A lack of variety in the work, appeared to inhibit learning and trained nurses on some wards either did not arrange for learners to share the technical work, or expected them to repeat the same type of task throughout a span of duty.

"Perhaps instead of one nurse doing observations every day of the week she could be given a variety of jobs."

"The thing I didn't like was that you were always doing the same things - i.e. bed-pans, while the more senior nurses had more variety."

"I found that you didn't gain much experience with dressings and drugs."

"There was a lot to learn on this ward if you had the time but you were usually kept busy and the senior staff did most of the responsible work and you didn't have time to watch."

Thus, it was not necessarily the inherent nature of the work on the ward, but the method of job allocation, that prevented learners from working in situations which they felt contributed to their education. It was within the power of the sister to incorporate teaching and learning opportunities into the routine through an anti-hierarchical system of job allocation. It was this action which turned a working environment into a learning environment for it brought trained nurses,who could be regarded as potential teachers, into contact with the learners, and introduced learners to work which they felt enhanced their learning. Some sisters brought learners into contact with other potential teachers by making provision for learners to go on the doctor's rounds.

"You were allowed on the doctors' rounds and were taught by them."

"Sister always insisted that we went on the consultants' rounds so that we knew what was happening to the patients."

"We always went on the consultant's rounds and he explained the operations to the nurses."

But on other wards, either learners were not allowed to accompany the doctors, or consultants did not take any action to satisfy their learning needs.

"Not allowed on the doctors' rounds which could have been beneficial."

"On consultants' rounds all students attended but they were not directly for the students of nursing but for medical students only. The ward stood still whilst the round took place - compared to other wards when consultants' rounds were hardly noticed and work carried on as usual."

"The consultants didn't teach much on rounds - only to the doctors."

The activities which occurred on wards when the work was done gives some indication of how the trained nurses perceived the role of the learner. On wards where the sister gave the needs of learners high priority, trained nurses taught the learners and provided them with an opportunity to read case notes and text books.

"Most afternoons during visiting, we had lectures."

"Lectures were given most weekends."

"Books and notes were always available. Time was never wasted or mis-used."

"The sister and trained staff were always keen to help by allowing us to read the patients' notes at any time."

But some sisters saw the student and pupil nurses only as workers and either took no action to satisfy their learning needs or attempted to extend their worker role.

"The routine for teaching was lax. There were plenty of opportunities for lectures but we only had a few."

"There was plenty to learn and many qualified staff. The slack periods were not used to their full advantage."

"We were never allowed to sit and study during quiet periods like most wards. Sometimes we had to do non-nursing duties."

"Too much emphasis on cleaning when a lecture could have been given."

"Notes and books were not readily available, particularly notes, which is a shame as these can be extremely helpful."

Learners appreciated having some discretion in their work and felt that this gave them confidence and contributed to an understanding of nursing.

"You tend to be given responsibility but not excessive to the extent that you cannot cope."

"Students given a lot of responsibility which helped to give confidence."

"Free thinking allowed - even encouraged. Responsible for total care of patients."

"The sister on this ward believed in making nurses think for themselves. She didn't write a work book but expected the work to be done. I think she got the best out of her nurses."

"Being left in charge helped in understanding what went into ward management and how to deal with different situations, e.g. last offices, which taught me what forms to fill in and how to deal with relatives."

Only one learner made a comment to suggest that she had felt anxious at being given increased responsibility and she was a learner on her first ward.

"Only one thing, I thought it was not a good idea leaving a beginner on the ward when the sister goes for a break."

But more experienced learners complained of the lack of responsibility on some wards.

"My responsibilities on this ward were NIL."

"One was not given the chance to use one's initiative. Thus I did not feel as if I had gained during my time there."

These data strongly suggest that learners see the ward sister as the key figure in the ward who creates the learning environment. The sister's influence on learning extends beyond the teaching that she does, for she is able to initiate teaching and through her ward organisation place learners in situations in which they learn. The ideal environment is anti-hierarchical and the trained and learner nurses work as a team.

CHAPTER 8

THE WARD SISTER'S PERCEPTION OF HER ROLE

Ward sisters and learners often have different frames of reference and there is not always concordance of view on what occurs on the ward. It was, therefore, of some importance to interview ward sisters in charge of wards rated by learners in order to obtain their opinion of ward activities and to ascertain how they perceived their role, and satisfied the needs of conflicting groups - patients, learners and doctors. Sisters were also able to provide data about the working environment (nursing and medical activities, staffing, routine and job allocation) which complemented data given by learners and helped to shape the observation stage of the study.

One of the ethical problems of conducting a small scale study of this nature is that publication of results may cause distress to those involved especially if findings are regarded as unfavourable. Even though pseudonyms are used, those involved are able to identify themselves. It was felt that interviews with all senior ward sisters on rated wards could enable data from individual wards to be interpreted on a wider basis.

Sample of Sisters.

The sample comprised senior ward sisters on wards used for the training of student and pupil nurses. Ward sisters who had been in post for less than 18 months were excluded since they would have had less time to establish their own style of management which would reflect their priorities.

At the commencement of the research, the population of senior ward sisters on training wards in the hospitals (excluding theatres and departments where there were no in-patients) was 16. Two sisters were excluded because they had only recently been appointed and their wards were not rated. Of the remaining 14 sisters, one left within a few weeks of the commencement of the study, one was absent because of illness and a third could not find time to be interviewed, but subsequently participated in the observation stage.

Thus 11 out of 13 senior ward sisters with over eighteen months experience on training wards in the hospitals were included in the sample (84.6 per cent) - this was a 68.8 per cent sample of senior ward sisters on training wards.

Data Collection

Semi-structured interviews were preferred to unstructured, informal interviews because less time was needed for analysis and there was greater comparability. An interview schedule was designed and pre-tested in another hospital (questions are listed in Appendix 3). Ambiguous questions were rephrased, and topics and questions ordered to achieve maximum response; less threatening topics such as ward, patients and work were discussed first, and topics such as teaching, learning and the ward sister's role were left until the end of the interview by which time good rapport had been established. Four drafts were prepared before the final schedule was ready for use. Responses to questions on the ward and work were pre-coded in order to shorten the interview and facilitate analysis, but some questions were open-ended so that no data was lost by limiting responses.

Informal approaches were made to ward sisters individually to see whether they would agree to be interviewed. An explanation was given that the study was concerned with how nurses learnt on the wards, but sisters were not informed at any stage that they were to be a major focus of the research, since it was felt that this could influence both what they said in the first stage, and what they did in the second observation stage, thus invalidating the findings. Sisters were told during the course of the interview that it was intended to observe in some wards at a later date, and all agreed in principle to co-operate. One sister, whose ward was not subsequently used for observation, forecast a sudden increase in teaching on wards on which observations were to be carried out.

It was stressed that appointments would be made at any time to suit the sister and that the interview would last at least an hour. In practice the interviews took between 1½ and 2½ hours due largely to the willingness of the sisters to respond fully to the questions. But the researcher was reprimanded by one sister for taking more than the allotted time.

No questions of a personal nature were included. The view was taken that because of the small sample, questions relating to age and educational qualifications would not allow any firm conclusions to be drawn and were, therefore, an unnecessary intrusion into the privacy of the respondents. The only personal characteristics to be given any consideration was the length of time the sister had been in post.

Results and Analysis

The sisters' experience in their present post ranged from 2½ to 24 years; 5 respondents (45 per cent) had been senior sisters in the same post for over eleven years. The majority of wards had between 21 and 30 beds; one had 18 and the largest 35. At the time of the interviews many beds were empty because doctors had gone on strike.

Each ward had a nucleus of permanent staff, and learners were allocated to the wards for periods of 4 to 12 weeks. No sister felt that this period was 'too long'. The adequacy of the allocation period depended on a variety of factors such as the turnover of patients, the type of nursing and specialist techniques carried out on the ward and the seniority and intelligence of the learner nurse. Sisters felt that nurses needed time to settle down and adjust to the different type of work.

> "It takes time to settle down and time to absorb technical knowledge. It depends on the girl, some adjust, but others take a couple of weeks. It's not a popular ward because it's heavy, but once they're here they're happy. They fear it because it's heavy."

"It's too short if it's under eight weeks, they have to get their feet under them and it takes about two weeks. The bright ones fit in straight away, but the turnover of patients is so great."

Sisters were well aware of what learners thought about the work on their particular ward and about the learning opportunities. There was general agreement between the sister's assessment of what there was to learn on the ward and the assessments made by learners who completed the rating questionnaires.

All the sisters felt that the majority of student and pupil nurses found the work on their ward interesting and some, at least, explained this 'interest' in the same task/technique terms of the learners.

"We have such a cross section - not all the same thing. The turnover is so quick, so many people. They meet operations which are so different. They open their eyes and adapt to new situations."

"Sometimes they may say they haven't enough to do as at the moment. Sometimes with third years if we have three or four there's not enough work for them. If it's quiet it's just basic nursing, no monitor or interesting cases. One male nurse hated it after surgery because it wasn't busy but he learnt a lot later and said he enjoyed it. He said he hadn't known there was so much to learn here."

Other sisters on wards which had been low rated knew that learners arrived with low learning expectations.

"On the whole they're more interested than they think they're going to be. They come with the idea that they're going to be bored. Most aren't but the odd one goes away with the idea that it's boring."

What was surprising was the way sisters described the learning opportunities on the ward in terms which placed the patients psychological and special needs uppermost, but when asked to name the six most important things they expected nurses to learn, specific procedures and techniques were the items most mentioned (Tables 13 and 14). In assessing learning opportunities 6 sisters (55 per cent) mentioned the psychological needs of patients.

> "Psychologically it is traumatic for mastectomy patients and those with colostomies and ileostomies. How to live with them."

> "The patients themselves, for instance, men with heart attacks - mentally it affects their outlook and therefore it's important how nurses talk to patients."

Other sisters talked of the 'traumatic effect of hospitalisation' and of the "basic things patients will want to know - how they're going to be cared for afterwards, so patients are not petrified." Both paediatric sisters referred to special needs of the children. The needs of the elderly were mentioned and one sister showed her awareness of learners' preferences.

> "Some geriatric patients may be put to one side by nurses - especially if they are busy. A poor old man may be ignored - so we have to get the girls to treat them the same as everyone else."

TABLE 13

FACTORS CONSIDERED BY SISTERS WHEN ASKED TO ASSESS THE AMOUNT TO LEARN ON THE WARD

N = 11	No.	%.
Psychological needs of patients with variety of conditions or in a specialist unit.	6	55
Special needs of patients in the ward	5	45
Specialist techniques/knowledge not relevant to other wards	5	45
How to talk to patients	4	36
Basic care given	3	27
Prevention of cross infection/aseptic techniques	2	19
Administrative work	2	19
Safety of patients	2	19
Subjects not taught in school	2	19
Variety of diseases/treatments for different consultants	2	19
Medicines given	1	9

TABLE 14

WHAT SISTERS EXPECTED ALL NURSES TO LEARN WHILST WORKING ON THE WARD

N = 11	No.	%.
Specific procedures/skills	8	73
Basic care/hygiene and prevention of pressure sores	6	55
Theory of specialist care/diseases	4	36
Psychological needs of patients/good nurse-patient relationship	4	36
Discipline /rules of the ward	3	27
Rehabilitation of patients	3	27
Safety of patients	2	19
Importance of adequate diet	2	19
Where everything kept	2	19
How to talk to visitors, keeping records	2	19

The emphasis on the acquisition of physical skills reflected the priority given to the nurse's worker role. Whilst 8 (three quarters of the sisters) expected nurses to become competent in practical skills, only 4 (a third) expected them to learn nursing theory. Over half expected learners to become proficient in carrying out basic nursing care.

The work on most of the wards was described as 'equally basic and technical'. To 10 of the sisters (91 per cent) basic nursing referred to repetitive tasks such as bed-baths, oral toilet and treatment of pressure areas which were common to every ward and every patient. These 'everyday tasks' were usually performed without the aid of specialist equipment which distinguished the technical tasks. 'Basic nursing' included a 'frequency' element so that in some sisters' minds technical activities such as dressings became 'basic' by virtue of their frequent repetition.

Ten (91 per cent) of the sisters said that the bulk of the work on the wards concerned the hygiene of the patients - basic nursing; and the majority also regarded this as the most essential work that was done on the ward. Specialist treatments such as dressings were mentioned, as forming the bulk of the work, by 8 sisters (73 per cent) but only 2 (19 per cent) said that it was the most essential. (Tables 15 and 16) Thus to the sister the most essential work was the basic, repetitive work which satisfied the needs of the patients, but to learners particularly on low rated wards, this was the work which some had considered to be irrelevant to their training (Appendix 6 Table 6).

Looking forward to the observation stage of the study it was, therefore, important to ascertain the learner's role during the basic work. Was she a learner or a worker? What was taught? What did she learn?

TABLE 15

ACTIVITIES FORMING THE BULK OF THE WORK ON THE WARDS

N = 11	No.	%.
Washing, bathing, oral hygiene	10.	91
Specialist treatments, e.g. dressings, traction	8.	73
Pre and post operative care	5.	45
Bed-making	4.	36
Taking temperature, pulse and respiration, and recording blood pressure	3.	27
Medicine rounds	2.	19
Care of pressure areas	2.	19
Toiletting	2.	19
Mobilising patients, getting patients up	2.	19
Feeding	1.	9
Being with patient	1.	9

TABLE 16

THE MOST ESSENTIAL WARD WORK

N = 11	No.	%.
Patient care/good nursing care, i.e. total care nourishment, pressure areas, hygiene	7.	64
Patient comfort - attending to individual physical and mental needs	3.	27
Supervision of patient	3.	27
Specialist treatments	2.	19
Mobility	1.	9
Feeding	1.	9
All essential	1.	9

The workload fluctuated during the day and all sisters except one said that the busiest periods were in the morning - two mentioned evenings. There was general agreement that the 'slack' periods were in the afternoons, when there was less work to do and more staff on duty because of an overlap of shifts.

The work on the ward was usually allocated by the sister or person in charge. Four sisters said that the routine was more or less the same every day. "It has been decreed, for at least five years", said one sister, and another who had at one time unsuccessfully tried to change the routine on her ward commented "It's automatic". However 4 sisters varied the allocation of work to give nurses a change and on others the routine and allocation of work varied with the changes in work and staffing.

On five wards (45 per cent) there was an element of hierarchical job allocation with specific jobs being done by junior or senior nurses. Three sisters (all on high rated wards) stressed that trained and learner nurses worked together doing all types of work, but the responses of 5 sisters (45 per cent) suggested that trained nurses only worked with learners during special procedures or when the nurse was new. Two sisters used the term 'teamwork' when talking about the allocation of work on their ward but this did not relate to the learners' ward rating, for one was the highest rated ward and the other a low rated geriatric ward on which the sister also operated a system of 'total patient care'.

Looking forward to the observation stage of the research, it was clear that the organisation of the work - what staff members did and with whom they worked - was a factor to be considered when describing the ward learning environment. A working hypothesis was formulated that 'trained staff teach during specialist activities' on the basis of the following results.

1. Data from sisters' interviews suggested that on half the wards trained staff worked with learners during specialist rather than basic activities.
2. It was said that both sisters and trained nurses taught by demonstration and supervision whilst working with learners.

3. The majority of sisters said that nurses learnt how to nurse patients with particular conditions as they worked under the guidance of senior nurses.

Asked specifically about their teaching activities, 7 sisters (64 per cent) replied that they were involved in teaching 'more than once a day'. Sisters not only taught themselves but initiated teaching by others and gave learners an opportunity to learn by allowing them to read books, and participate in specific activities. Demonstration and supervision of practical procedures figured prominently in the responses, since it was mentioned as a teaching method by 9 sisters (82 per cent) (Table 17).

TABLE 17

TEACHING ACTIVITIES UNDERTAKEN BY THE SISTER

N = 11	No.	%.
Demonstration and supervision	9	82
Provision of learning opportunities	7	64
Group teaching/lectures	6	55
Initiating teaching by others	6	55
Teaching by example/whilst working	5	45
Report	3	27
Asking/encouraging questions	1	9
Assessments	1	9
Teaching rounds	1	9

The subjects taught by sisters included skills and practical procedures 9 (82 per cent), patient care and diseases 8 (73 per cent), theory behind practice 6 (55 per cent), drugs 3 (27 per cent), and anatomy and physiology 2 (19 per cent). Although over half the sisters said that they were involved in group teaching sessions, some were reluctant to participate in them.

"I feel inarticulate and unable to get across to nurses in a formal way."

The comments of some sisters suggested that feelings of insecurity and doubts about their knowledge and teaching ability may have prevented them from taking up opportunities to teach in more formal group situations. However, one sister on a very high rated ward, who did not like teaching, said that it made no difference to the amount that she did "I still do my best". But others clearly did not like teaching away from work situations and preferred others to do the formal teaching.

"I'd rather the SRN or SEN taught. As you get older, you get out of date. Some 'number sevens' don't know as much as the pupils."

"I don't mind teaching in the actual situation, talking and telling, for instance on medical rounds. But lecturing nurses, no, I lack confidence in knowledge and the way to put it over."

"I find it difficult to get going, nurses are very bright. Sometimes I feel intimidated. Sometimes I'm in a nervous state and have to force myself. I like doing bedside nursing. Sometimes it's difficult to get started, therefore I may not do as much as I should, but nurses say I give marvellous lectures, but I get nervous about it. How do I start? What shall I say?

In contrast 6 sisters (55 per cent) enjoyed teaching and felt that this affected the amount they did, and it is interesting to note that 5 of these sisters came from wards which had been highly rated by the learners.

3 out of 4 sisters on wards which had been low rated felt insecure in their teaching role save only for the teaching they gave whilst working with nurses in the ward.

Teaching, for most ward sisters, meant a regeneration process through which nurses mirrored their own image. Responses from 9 sisters (82 per cent) who were asked what they meant by teaching showed that they were committed to handing down to the new generation of nurses their own skills and knowledge.

"Passing on my knowledge, practically and theoretically, six at a time, may be less or a few more, or at the bedside just one or two."

"Passing my knowledge on to student nurses and making them good nurses for patient care - not administration."

"Transferring knowledge from experience to a nurse. I try to teach so that she knows everything I do, so she will be as bad or as good as I am."

"Handing down to the younger generation all the knowledge I've gained over the years."

Confirmatory data that most of the learning about nursing patients with particular conditions, took place at the bedside rather than in 'lectures' is shown in Table 18. All sisters expected nurses to learn how to nurse patients with the type of conditions which occurred in their ward, and the majority 8 (73 per cent) said that this was achieved when senior nurses taught or gave guidance as they worked with the nurses, and 2 sisters (19 per cent) said that nurses learnt by working with a senior. They also learnt by nursing the patients 3 (27 per cent), from lectures 2 (19 per cent), reports 2 (19 per cent) having written details and text-books available and by doing 'total patient care'.

TABLE 18

WAYS IN WHICH NURSES LEARN HOW TO NURSE PATIENTS WITH PARTICULAR CONDITIONS

N = 11	no.	%
Senior nurses teach as they go round/ give guidance/demonstrate/supervise	8	73
Nurses learn from patients/seeing how patients are nursed	3	27
By working with a senior	2	19
Lectures	2	19
Reports	2	19
Written details	1	9
Reading text-books	1	9
Example of senior people	1	9
Total patient care	1	9

The sisters did not see themselves as the sole teacher in the ward. Asked about other ward teachers, all the sisters said that other members of the trained staff taught, 6 (55 per cent) mentioned student and pupil nurses, 4 (36 per cent) mentioned the clinical teachers and two named doctors. When asked what these teachers did 4 sisters responded "The same as I do." Nine sisters (82 per cent) said that the other ward teachers taught skills, and also mentioned were patient care and diseases 7 (64 per cent), 'theory of nursing practice' 4 (36 per cent), 'anatomy and physiology', 'trolley settings' and 'drugs' which were each named by 2 sisters (19 per cent).

Only 5 sisters (45 per cent) felt that they should have the major responsibility for seeing that nurses learnt in the wards. Six (55 per cent) felt that the responsibility should be shared with other trained staff. One sister whose ward had been low rated by learners quite definitely did not want the sole responsibility because she felt out of touch with learners' training needs.

"You've got to face the fact, that when you are older as I am, you can't tell what they're having in lectures. A young person who has just finished knows."

On most wards, the bulk of the work - and by implication, the supervision and demonstration whilst working - took place in the mornings. However, the most frequent activities said to occur during the slack afternoon periods were 'teaching sessions', which were mentioned by 10 sisters (91 per cent), but qualified by 3 sisters with the caveat 'if there is time'.

Thus the student or pupil nurse was a 'worker' in the morning, and a 'learner' in the afternoon. But there was some reason to believe that the 'learner' role had been imposed from outside, since 5 sisters volunteered the information that the General Nursing Council had forced an end to 'split duty' working. Sisters were deprived of workers in the morning and evening periods when they needed them and had a surfeit of learners in the afternoon who were also forbidden to 'clean' - this was described as a 'great bone of contention' by one sister. This issue more than any other highlighted the perception of the student and pupil nurses as primarily 'workers'.

Paradoxically, the alleged action of the General Nursing Council was said to have interfered with ward teaching. Some sisters argued that they were deprived of workers in the morning and this inhibited teaching and learning because work could not always be postponed to the afternoon when there was a surfeit of workers, which meant that there was less time to teach nurses whilst they worked during the mornings. It appeared that an enforced change made to benefit learners had disturbed a social order geared to work, and the sisters did not like it, although they justified their dislike by reference to its bad effect on teaching.

"I would teach them more, but pressure of work and shortage of staff may stop me. The GNC brought an end to split duties so you can't reorganise the day - you can't leave a patient until 2 p.m. when they need a blanket bath. With eight on in the morning you can teach them more."

"I don't like the end of split duties - there's a great bulge in the afternoon. We aim to do the dressings in the afternoon, but consultants want to see them in the morning. I would like more nurses in the morning - split duties satisfy the patients more because now there's a bulge in the afternoon and we need more in the morning."

The conversations about the end of split duty working also gave some indication of the sister's perception of the needs of the learners in relation to the other two groups making calls on her time and attention: patients and doctors. What emerged here, and in the responses to other questions about the ward sister's work, was that the needs of the learner came below those of patients and doctors.

Asked about their five most important activities, 9 sisters (82 per cent) mentioned 'supervising patients/patient comfort', and the same number listed 'reporting to doctors/doctors' rounds. 7 (64 per cent) mentioned 'teaching learners' (Table 19). However, sisters were not always able to carry out the activities which they felt were important, because of conflicting demands on their time. One sister who had been without a ward clerk for several months had found that much of her time had been taken up with "admissions, discharges and answering the telephone." Sisters were asked which activities took up the most time - supervising patient care was mentioned by 5 sisters (45 per cent), reporting to doctors by 3 (27 per cent), and only one mentioned teaching learners (but this was not later confirmed during observations). (Table 20).

TABLE 19

ACTIVITIES NAMED BY WARD SISTERS AS BEING THEIR FIVE MOST IMPORTANT ACTIVITIES

N = 11	no.	%
Supervising patients/ensuring care carried out/ patient comfort	9	82
Reporting to doctors/carrying out their orders/ doctors' rounds.	9	82
Teaching learners	7	64
Communication of information/liaising with other departments	6	55
Attending to emotional needs of patients/talking to patients and relatives	5	45
Administration/ward organisation	3	27
Supervising/assisting nurses	2	19
Creating a light atmosphere	2	19
Teaching by example	1	9
Assessments/examinations	1	9
Practical work	1	9

TABLE 20

SISTER ACTIVITIES SAID TO TAKE UP THE MOST TIME

	No.	%.
Supervising patient care	5	45
Reporting to doctors	3	27
Communication of information	2	19
Attending to emotional needs of patients	2	19
Supervising/assisting nurses	1	9
Teaching learners	1	9
Administration/ward organisation	1	9

The amount and type of nursing care given by sisters varied from ward to ward; 3 (27 per cent) maintained that they were 'part of the workforce' but others said that what they did depended on staffing - they did more when there were fewer nurses on the ward. Nine sisters (82 per cent) said that they did special procedures, 5 (45 per cent) did drug rounds, 4 did basic care and 2 said that they did 'everything'.

But whilst most sisters could, and did, delegate nursing care and teaching activities, no sister delegated the consultant's rounds to any other staff member when she, herself was on duty, and there were examples of sisters making special arrangements in order to be on hand when the consultant needed them. Facilities for other doctors varied with rank.

With the exception of one sister on a geriatric ward, the sisters assisted medical staff or were involved in doctors' rounds, more than once a day. Sisters monitored entry to the ward and when doctors appeared arranged for a nurse of comparable rank to accompany them.

> "I expect to be told if anyone important comes in, for instance a doctor..... I would send a junior nurse with a doctor - only a junior doctor, not a consultant. I wouldn't let a junior nurse go with a consultant."

Another sister explained that junior nurses could not go with consultants on her ward because they could not elicit information.

> "The consultants are reserved so you have to question, otherwise you'd never find out. A little nurse wouldn't be able to do that and relatives need to know."

Doctors were accorded respect according to their place in the medical hierarchy, so that the only contact - and therefore communication - between learners and doctors, who were potential teachers, was with the sister's permission.

"The ward sister or junior sister go on consultants' rounds. Trained staff see Registrars, Housemen.... go on their own unless there is anything special."

In the event of two doctors appearing simultaneously the rank and status of the doctor determined the sister's action.

"The next most senior nurse would go with one doctor. It depends on the order of importance of the doctors. I go with the consultants. If there are two consultants at once, I acknowledge the second and stay with the first."

Thus the consultant was given high priority and had first call on the sister's time. The only rare occasions sisters could recall delegating a consultant's round was when they had been with another consultant, and on one ward, a student doing a statutory assessment had taken a round. Sisters rearranged off-duty or lunch times to ensure their availability.

"The junior sister and I vary our lunch times so that one of us is always there to ensure continuity. I feel it would be rude to leave a written message."

The importance the sister attached to the consultant's and doctor's rounds was to do both with the sister's place in the nursing hierarchy and also with her role as intermediary in the communication network. As a key person in the ward the sister negotiated between the various groups - doctors, patients, relatives and learners. In the face of changes in junior medical staff she ensured continuity of care by communicating the consultant's wishes to junior doctors and interpreting his wishes when he was not present.

"I've grown up with the surgeons and know the intravenous regimes. I go with the housemen and they write the charts as they go round...

"The registrars come most days - they change quickly and rely on me to say what the consultant likes.. This week the registrar said 'Ryles tube up to-day'. I ignore that and leave it. The consultant does not know, but approves - I don't tell the registrar 'I told you so'."

Sisters did not always carry out the wishes of junior doctors and negotiated with new doctors. Another sister said

"Wounds always had infections when I came. I always put dressings on and don't get infections - E.Coli. The new doctor doesn't like dressings but I think I've won."

Whilst ward sisters had some power over junior doctors they were clearly under the control of the consultants and responded to his wishes. One sister had attempted to delegate one consultant's round, but her presence on the ward on the day of interview, in order that she could take the round, when she should have been keeping another appointment, suggested that her attempt had failed - the consultant expected her to be available and she made herself available.

"I do the rounds if I'm there. I should really be on a study day to-day but consultant X was mad because I wasn't here last week.... I'd been on night duty, so wasn't on duty. The consultant was very angry. I left a student to do the other consultant's round two weeks ago, because I felt they were depending on me too much."

The overwhelming impression given from these interviews was that all the sisters felt a strong sense of commitment towards their patients, whose needs came before those of the learners, but ultimately they were dominated by the consultants - the wishes of the consultant were given top priority.

Whilst it was rare for a learner to be in sole charge of a consultant's round, on 7 wards (64 per cent) they were allowed to go on rounds, sometimes at the express wish of the consultant. The majority of these sisters, who were on both high and low rated wards, felt that nurses had good opportunities to learn.

"Yes, definitely they learn. They understand more about the patients because of the questions they ask and the replies. They remember more if they go on the round."

"Yes, but doctors sometimes talk above them so I ask the doctors to explain the X-rays."

"He explains a lot..... and likes the nurses to take an interest."

Of the 4 sisters who did not allow learners to go on rounds, none believed that learners benefited, remarking that the conversation was 'too technical' or that they were 'pushed to the back'. Only one said that nurses were too busy working on the ward. However, one consultant on a high rated ward had substituted ward lectures which he felt were of more value than ward rounds. (These ward lectures were mentioned favourably by learners who rated the wards). Seven sisters from both high and low rated wards described how they negotiated on behalf of learners, in order to get doctors to teach and several commented that doctors would teach more if they were asked. They also acted as intermediaries by asking questions since some learners 'were afraid to ask' - whilst nurses might question junior doctors they would not question consultants.

A consequence of the sister's key role in the communication pattern was that they were subjected to frequent interruptions and 5 sisters (45 per cent) said that these interruptions prevented them doing what they wanted to. Other factors which affected the way they did their work were staffing (the number and quality) mentioned by 6 sisters (55 per cent),

and the workload mentioned by 2 (19 per cent). Three sisters, on both high and low rated wards, would have liked more time for teaching. However, comments made by other sisters suggested that it was not only 'time' that prevented teaching but the sister's order of priorities, and learners came below doctors.

> "I enjoy teaching but I get tied up with other things - doctors' rounds, relatives, sorting out the bed situation."
> "If there's no round I would go with students."

There were many comments to indicate that where there was a conflict, teaching was the activity that was sacrificed, and this is not surprising since 8 of the sisters (73 per cent) had had no instruction on how they were to carry out the teaching component of their role. Nationally and locally, emphasis has been placed on the sister's management role, and all except one of the sisters had been on a management course. In contrast, only one sister had been on a teaching course, and two had received some instruction on teaching methods whilst on a management course.

Ten sisters (91 per cent) were satisfied with liaison between school and ward and 5 drew attention to the good relationships which had been established through the clinical teachers. One sister felt that without them they could be 'very segregated'. Three sisters who received no visits from clinical teachers, regretted this and would have welcomed more contact. In particular, a sister who had expressed doubts about her own teaching ability and whose ward had been low rated by learners, felt that clinical teachers could inform them of what was taught in the school.

> "We should have a clinical tutor. If she came to the ward we could ask if we were teaching nurses correctly - we would know what was taught in the school. We could ask the clinical tutor. We may be undoing all the good that is done in the school."

Sisters did not have a coherent plan of the school training programme, nor of a learner's previous training, but this lack of information did not cause them concern. Some sisters liked to start afresh or carried out an entirely new type of nursing which was not practised on other wards. However, it was interesting to note that all the sisters on the high rated wards kept some form of list or record of some items that were to be learnt or had been learnt, and in some cases, sisters actually produced lists or books for the researcher to see. In contrast, no sister in the lower rated wards indicated that she kept such a list or record - learning objectives were vague and nurses were told what to learn whilst they worked together. One remarked "I don't exactly put it down in black and white. I tell them at the time". Another said, "when I get third years, I expect them to know - I ask them if there's anything. If nurses are in their first or second ward I would tell them what they could learn."

Most sisters expected learners to have a basic knowledge, and asked about nursing skills as the need to do particular work activities arose. Sisters interest in a nurse's previous training appeared to be more concerned with determining the skills of the workforce, rather than ensuring the continuity or progress of an educational programme.

> "My expectancy of them depends on knowing which wards they have worked on. If we have a diabetic, I can get a nurse to look after the chart and draw up the insulin if she has been on a medical ward."

> "If nurses are junior I may ask them. If they are senior I expect a wide experience. It might help to know which wards they have worked on.... with a diabetic it helps to know if they have been on a medical ward."

There were a few subjects which sisters felt were better taught in the school; 8 sisters (73 per cent) mentioned anatomy and physiology, and other subjects were theory of diseases and practice 3 (27 per cent), basic care 2 (19 per cent) and drug dosages, cardiac arrest procedures ethics and trolley settings which were each mentioned by one sister. But the majority of sisters 10 (91 per cent) firmly believed that learners could only learn by doing the work, as opposed to being supernumary.

> "They learn by approaching the patients - patients like having their own nurse and not just a nurse passing through. Nurses learn how to approach."
>
> "You can read a book and think you know it. You know better if you've nursed a patient - even better if you've been the patient. You need to handle a patient."
>
> "You need to be in the situation to be confident of doing things."

These data show that the ward sisters subscribed to the widely held belief 'that nurses learn as they work'. But the root question carried forward to the second stage was "What precisely do nurses learn as they work?" For it was by no means certain from these interviews that learner nurses learnt during every type of work activity.

The aspect of the ward sister's role that sisters found enjoyable was the contact with the patient, and not the teaching role or assisting doctors; they were there to satisfy the needs of the patient. When asked if they liked being a ward sister, 9 (82 per cent) indicated that they enjoyed being with the patients or in the nursing situation - and only one mentioned teaching.

"I find it satisfying, I just enjoy it; I don't know why. I like looking after patients, doing my best, and it's nice hearing the over 70's saying "I wouldn't be afraid of coming back." I wouldn't like just being an administrator."

"I love the old men - love the patients. I love it.... I'm interested in people - what makes them tick. The lower down the scale the better they cope - relatives with head scarves and 'fags', after an old man has had both legs off ask "when can we have him home?"

"The ward sister is the only one nursing patients. Patients discuss problems with me. The sister is the only thing patients can hang on to. They miss the Matrons - they like the uniform and feel safer."

SUMMARY

Freed from the demands of consultants, it seemed clear that sisters would give their time to patients rather than learners, because this was the aspect of their role that they found most satisfying, this was their chosen role, whilst for most ward sisters the teaching role had been imposed. The learner nurse was perceived as a 'worker' who satisfied the needs of patients, rather than a 'learner' who needed to be placed in situations which would satisfy individual learning needs.

Sisters described learning opportunities in terms which placed the patients' psychological and special needs uppermost, but when asked what learners were expected to learn, special procedures and techniques were the items most frequently mentioned.

Consultants had first call on the sister's time; whilst nursing care and teaching activities were delegated, no sister delegated the consultant's rounds.

The majority of sisters believed that learners could only learn nursing by doing the work, which infers that nurses learn as they work.

Working hypothesis for Stage 2

Trained staff teach during specialist activities.

PART III

PART III.

CHAPTER NINE

RESEARCH DESIGN : STAGE TWO

The results of the first stage laid the foundations for the second stage. A variety of working hypothesises were formulated (see pages 113 and 114) and these served three purposes - to identify extraneous variables, to guide the overall research plan and to highlight areas requiring further investigation. The characteristics of a ward learning environment were set out in a working model (Figure 1). It was clear that some environmental variables such as ward layout and size, and social variables such as age, education or intelligence of sisters and learners, could not be controlled or taken into account, but that others would have to be either controlled or monitored, because data from learners indicated that they could have a profound effect on ward teaching and learning.

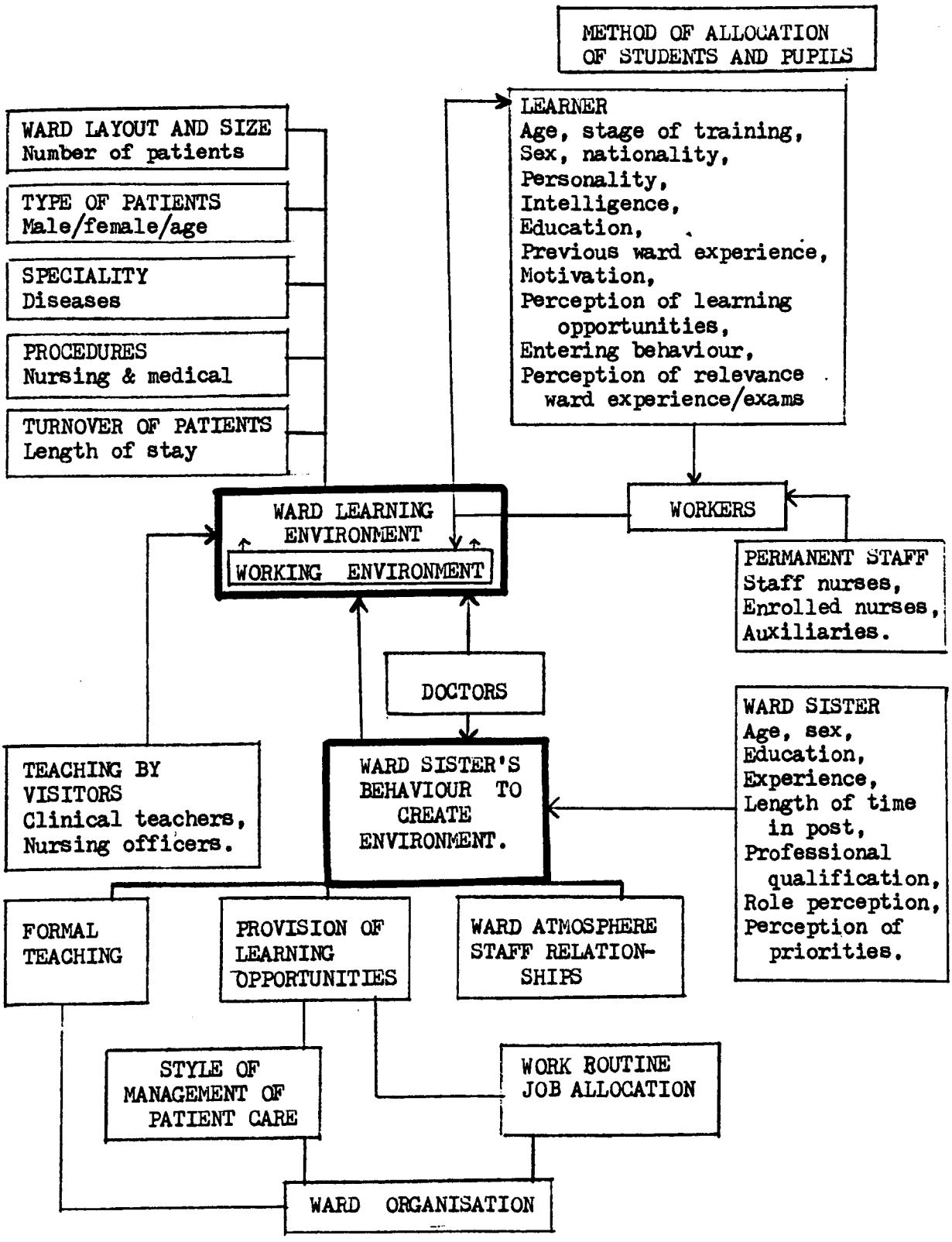
It can be seen from the model, that the ward work and working environment are determined by the ward size and layout, which sets limits on the number of patients which can be accommodated in the ward, the type of patients, diseases from which they are suffering, nursing and medical procedures associated with diagnosis and care, and turnover of patients.

The workers in the ward are the permanent staff, and student and pupil nurses who are transient workers since they stay for a limited period on wards to which they are allocated. The number of learners on a ward depends on the number of nurses in training, wastage rates, the system of training and method of allocation to wards.

The characteristics of the work and the working environment, the quality of ward staff (i.e. the ratio of trained to untrained workers) and staffing levels are largely outside the control of the ward sister. They are not completely outside her control, however, since a vociferous ward sister may be able to gain improvements in both facilities and staffing.

Figure 1

CHARACTERISTICS OF A LEARNING ENVIRONMENT



Within the control of the ward sister, is her behaviour to create a working environment which is also a learning environment. The characteristics which fall within the sister's influence, are the formal teaching, the provision of learning opportunities, which are a product of the ward organisation (style of management of patient care, work routine and method of job allocation) and the ward atmosphere and staff relationships.

Three principal working hypotheses contributed to the research design:

1. Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality.
2. Trained nurses teach during specialist activities.
3. Student and pupil nurses learn during some work activities.

There were, therefore, two main areas on which the research focused: teaching and learning, and ward sister activities. It was assumed that there were differences in the teaching and learning that took place on different wards, and that when the factors which fell outside the sphere of influence of the ward sister were controlled, the differences would be related in some way, to ward sister activities.

The objectives of the second stage were as follows:

1. To identify and describe teaching/learning situations in 'good' and 'less good' wards.
2. To identify and describe activities undertaken by the ward sister which could account for differences in ward learning environments.

Selection of Wards

Of the initial 14 wards that were rated by learners in Stage One, 11 were under the management of the same senior sister and were still being used as training wards for student and pupil nurses. In order to

control the type of work which occurred on the ward, it was decided to select pairs of wards of similar speciality - each pair to comprise a 'good' and 'less good' ward (determined by the learners' rating in Stage One). Highly specialised wards could not be matched and, in fact, only three pairs of wards satisfied the selection criteria. Although the wards were all under the same District Management and School of Nursing, they were situated in two different hospitals. It was not possible to match pairs for sex of patients except in the case of the surgical wards.

The three pairs of wards were Charlotte and Elizabeth wards, which were both female surgical wards, Heaton and Naomi, which were male and female orthopaedic wards respectively, and Neville and Irena, which were male and female medical wards. The orthopaedic wards were both in St. Anne's hospital, the two medical wards were in St. Joan's, and one surgical ward was in St. Anne's and the other in St. Joan's.

Preliminary approaches were made to the six ward sisters to see if they were willing to participate in the second stage. Five sisters had been interviewed in the previous year and were aware that an observation stage was planned. The earlier explanation that the study was concerned with how nurses learn on the wards, was repeated, but at no stage were the sisters informed that their own activities or those of the other trained staff members would be observed. Such knowledge could have precipitated an upsurge of teaching activities or led to an abnormal pattern of ward organisation. All the sisters, with varying degrees of enthusiasm, agreed to assist.

Ward Workload

Results from the first stage suggested that there were at least two wards (Elizabeth and Naomi) on which the workload had affected the amount of teaching and learning that occurred; it was therefore necessary to take this variable into account. It was not possible, nor indeed desirable, to interfere with the workload on the ward, since it changes constantly and it is assumed that nurses learn under all circumstances.

The workload on each ward is derived from the patients who are receiving care, therefore by measuring the dependency of each patient it is possible to calculate a Work Load Index for each ward. The system used in this study was the dependency system developed by Barr and his team at the Oxford R.H.B. (1967) which uses three main criteria for allocating patients to care groups - the level of illness, combination of physical and mental capacity and complexity of care. (Mulligan 1973) Using this system it was possible to allocate patients to one of five care groups which ranged from 'Self care' - Group 1 to 'Intensive care' - Group 5 (Appendices 7 and 8). Patients in each care group were given a score equivalent to the care group number, and the ward workload index was derived from the total of the scores.

The information necessary to assess the dependency of each patient was not readily available to an outsider so the assistance of the sister or a member of ward staff was needed.

In designing the patient dependency form, attention was paid to the time sisters would need to complete the form. The Barr team found that approximately 10 to 15 minutes were needed to complete forms for an average size ward. After pre-testing forms for both individual patients and all the patients in the ward, it was decided to use separate forms for each patient, which were modelled on the one used by Barr (Appendix 9).

One form could be used for up to 10 days, which would cover the planned five morning and afternoon observation periods, each form could be completed quickly and it was possible to record other patient data (e.g. age, diagnosis and day since admission) on the same form, since it was felt that these patient characteristics impinged on the research area.

In the week prior to the commencement of observations on each ward, the sister was given samples of forms to fill in, together with instructions for completion (Appendix 10) and a list of care groups, so that she was aware of the importance of the recordings. No problems were encountered and the practice period gave sisters time to familiarise themselves with the system. The sister on Elizabeth ward had very little time to practice, however, because when observations were due to begin on other wards, the doctors once again went on strike and would deal only with emergencies, and Elizabeth was one of the few wards to be relatively unaffected. Contrary to well laid plans, the observation stage, therefore, commenced on the one ward which had a reputation for being extremely busy. The intention had been to commence observations on a 'quiet' ward so that observer expertise could be acquired under peaceful circumstances.

All the forms were kept on a ring binder on each ward, together with instructions for completion. It was a simple matter for sisters or the researcher to place new forms at the front of the folder as patients were admitted and remove forms of discharged patients to the back. The sisters were extremely helpful with what must have been a tiresome chore and on several occasions, forms were already completed when the researcher arrived on the ward at the commencement of the observation session. Even on very busy wards, sisters tried as requested, to complete the forms immediately prior to or after the observation times, but this was not always possible. Therefore, there were a few occasions when sisters

were observed completing forms when they would normally be doing other activities, and in this respect the research did distort the ward organisation. It was on the wards where the workload was high that the difficulties associated with completion were most apparent, but it was in respect of these wards that the measurement of the workload was particularly necessary. Even so, the time spent on completion was rarely more than 15 minutes in relation to each session, so the distorting effect was minimal, and it must be stressed that most sisters completed the forms outside observation times.

The workload index - a number calculated on the dependency score of each patient - allowed comparisons to be made between wards and to show variations on the same ward at different times. However, such a calculation ignored the number of workers available to do the work - obviously the fewer workers there are to do the work, the busier each worker will be! Lelean (1973) developed a more sensitive indicator of 'busyness' by taking the number of nurse hours into account. With some modifications, a similar technique was used to calculate the workload per nurse per hour for each morning or afternoon session (Appendix 11). Put simply, this was the workload index divided by the average number of workers who were available each hour to do the work.

The workload index and the workload per nurse per hour were calculated separately for each morning or afternoon session, even though they occasionally took place on the same day. Work and staffing changed on all wards, and during pre-testing on a surgical ward one morning, it was noticed that nurses appeared to be looking for work although a high workload index had been calculated. The discrepancy between the high workload index and the observed conditions was due to the fact that several patients, who were due to have an anaesthetic later in the day, were placed in care group 5, but during the morning they were fully self-reliant and, therefore, in care group 1. Ideally, it would have been desirable to monitor the workload every hour, but demands on the sister's and researcher's time prevented this.

Ward Staffing

The number and quality of workers on the ward could not be controlled, but details were recorded, both in order to calculate the workload per nurse per hour, which has already been discussed, and to calculate the ratio of learners to trained nurses. Thus, if there were 4 learner nurses and 3 trained nurses on duty during an observation session, the ratio was 4:3. When this was reduced in order to allow comparisons to be made this became 1.33 : 1 (i.e. 1.33 learners to 1 trained nurse).

Research Methods

Throughout the research, an 'open minded' approach was maintained, and although working hypotheses directed the research to particular areas, results were not pre-judged. Brown (1958) warns that "research is hindered by failure to keep an open mind." (p. 27) The ward learning environment was conceptualised as a dynamic concept in which separate interactions between learners and others combined to create the whole, and the methods were designed to reflect changes. The approach adheres closely to the 'interactionist perspective' advocated by Denzin (1970 p.6)

> "The sociological imagination demands variability in the research process. The process by which sociology is done should not be too rigorous; an open mind is required."

Using the term 'triangulation', Denzin argues that "multiple methods must be used in every investigation, since no method is ever free of rival casual factors.... can ever completely satisfy the demands of interaction theory, or can ever completely reveal all of the relevant features of empirical reality necessary for a theory's test or development." (p. 26).

Other writers also argue for the use of more than one method so that incoming data can be cross-checked. Stacey (1969) devotes a chapter to the subject and states "whatever the main method used, other methods should

be introduced as checks or supplements". (p. 67) Thus, in the study as a whole, and in the second stage, more than one method was used in order to generate theory and to verify data from other sources.

Dual Methods : Observation and Interviewing.

At an early stage in the design process, a case was made for observing in the ward in order to identify teaching/learning situations and aspects of ward organisation, because other researchers into nursing had observed that nurses did not always do what they forecast they would do in certain nursing situations (see p. 67/68). But this phenomenon is not confined to nurses, for individuals are not always in a position to predict behaviour in changing circumstances. Fox (1966) believes that observation is "best suited for behavioural description" (p. 203), and Selltiz et al (1965) argue that the "greatest asset of observational techniques is that they make it possible to record behaviour as it occurs. All too many research techniques depend entirely on people's retrospective or anticipatory reports of their own behaviour.... remote from the stresses and strains that influence what he does or says in the ordinary course of events." (p. 20).

As far as teaching and learning in the ward is concerned, how is it possible for the trained nurses to predict that they will always teach nurses at particular times, or for nurses to say what they believe they have learnt without taking account of the differing demands that are made on them? All too often both trained and untrained nurses say that there isn't time for teaching and learning, but how can one evaluate the concept 'time'; surely what they mean is that they did not teach or learn because they were doing other things or giving priority to other groups? It is, therefore, essential to collect data about events as they happen - whilst the stresses and strains are present, so that conflicting demands can be taken into account.

Having made a decision to observe in wards, a central problem concerned the degree of involvement there would be between the researcher and the researched. There has been such discussion in research literature on the role of the observer which has centred on the extent to which the observer is an 'observer' or 'participant'. Gold (1958 p. 217/223) describes four types of observer role ranging from the 'complete observer' on the one hand to the'complete participant' on the other, and in between these two extremes lie the 'observer as participant' and 'participant as observer'. The research activity of the occupant of the two extreme roles is not known to those being observed, but the researcher in the intermediate roles reveals the fact that he is investigating but not necessarily the exact nature of the activities. Leaving aside the ethical issues surrounding a role in which one individual 'spies' on others without permission, such as occurs when either of the two extreme roles is adopted, the type of observer role depends on the degree to which the observer needs the assistance of the observed either in interpreting the meaning of events or in providing data that cannot be observed. In this study considerable assistance was required from learner nurses and insofar as the researcher sought interviews with them about observed events, the observer role was one of 'participant as observer'. However, the research activities were highly structured and, therefore, the role differed from that used by many sociologists for whom 'participant observer' means a relatively unstructured role which develops over several months rather than days. The activity was one of 'structured participant observation' as opposed to 'unstructured participant observation.'

A flexible observer role was adopted: flexible in the sense that it allowed the researcher to probe situations which were felt to be particularly relevant and to withdraw from the research scene in order

to view the overall organisation of the ward. Since the researcher was fully conversant with the nursing activities long participation was not needed in order to learn the meaning of words or to acclimatise to the hospital environment, but by the same token, it was necessary to be able to withdraw from the scene in order to observe activities, which are taken for granted by those who are closely involved in them. Bendall (1973) comments "A great deal goes on all the time in a hospital ward, and until one is quite uninvolved it is not fully appreciated." (p. 35).

The system of observing the overall organisation of the ward by sampling activities of workers on the ward, and making a more detailed investigation of potential or observed teaching/learning situations, by interviewing learners involved in observed activities, which was eventually adopted, had many of the advantages of 'participant observation' even though it was more highly structured. Becker and Greer (in Filstead 1970) argue that participant observation enables the researcher to see things that would not be reported in interviews and allows him to check distortions, and both these advantages were achieved in this study without long involvement in field work on individual wards.

Participant observation as understood by writers such as Becker and Greer, or Glaser and Strauss (1965), was considered, but not adopted as the method in this study for the following reasons. Firstly, the method of sampling activities and events in order to develop theory, during unstructured participant observation, is open to question, for the reader is in no position to assess the relevance of the sample of events and must depend almost entirely on the assurance of the observer that all types of situations were investigated. Whilst such methods may be suitable for a team of experienced researchers, there would inevitably be doubts and criticism were this method to be used by a lone, relatively

inexperienced researcher. Secondly, at the commencement of the second stage the researcher already had knowledge of which wards were highly regarded by learners and which were less highly regarded. There was, therefore, a real danger that the well-known 'halo-effect' could lead to 'favourable' data being collected in 'good' wards and unfavourable data in 'less good' wards. A strict method of sampling events meant that observer bias was at least reduced, if not entirely eliminated. There were many occasions when the researcher was able to verify the comments made by learners in the first stage, and it was with relief that subjective observations could be backed up by systematic activity sampling. For instance, there was an occasion when learners and trained nurses on one ward were found in two separate groups, and learners were reluctant to disturb the trained nurses who had congregated in the office. This discovery gave credence to a comment which had been made by a learner during the first stage - "The trained staff are 'clicky' and stay in the office." Ten minute activity sampling showed that this situation was not exceptional, but in an unstructured observation session an isolated incident of similar nature could have been exaggerated out of all proportion because of prior knowledge about the ward.

The central purpose of the second stage was to identify and describe teaching/learning situations in the ward. What was meant by teaching? Who was to determine the reality? Reliance on only one source of data would create distortions, for whilst an outside observer could observe or overhear overt teaching, she would be unaware of teaching that was not observable. Sisters, learners and other ward actors could describe what they believed were teaching/learning situations but they would be giving their perception of reality, and versions would not necessarily correspond. It was for this reason that two main methods were used to collect data on teaching and learning. By interviewing learners about

interactions which had been observed by the researcher it was possible to reduce distortions and clarify discrepancies.

During pre-testing, it was found that reliance on learners as the sole source of data on teaching and learning, was misplaced because of their orientation towards highly technical procedures. When asked to record details of situations in which they had had an opportunity to learn, the majority of incidents which learners recorded were highly technical or unusual procedures such as carrying out 'cardiac resuscitation' Learners tended to ignore the more 'ordinary' work, as the following incident will illustrate.

During preliminary observations in a hospital which was not used in the main study, the researcher observed a Senior Enrolled Nurse working with a first year student. The researcher did not go behind the screens but was aware from conversations that the nurses were attending to the pressure area care of a very ill patient, and could intermittently overhear the Enrolled Nurse telling the student how to do some of the care. Afterwards, the student was questioned and asked if she had had an opportunity to learn anything. She replied "Not really". The researcher asked the student whether the Enrolled Nurse had been telling her how to do some of the care and received the following reply. "Well, she was telling me how to put some cotton wool around a small pressure sore on his heel to relieve the pressure." On further questionning the student said that she had not known how to do this prior to the Enrolled Nurse telling and showing her, but that she would not have recorded that incident as being important for her education as a nurse, adding as an afterthought, "but I suppose it was important for the patient. I was thinking more about 'chest aspirations'. I haven't seen one of those."

In a second incident, a pupil nurse was asked to record situations when she had an opportunity to learn, and whilst indicating her willingness to assist, said "I don't suppose there'll be anything because I just get on with the work" - implying that 'work' gave her no opportunity to learn. However, at the end of the two hour period, although she had recorded no details of learning opportunities, she informed the researcher "Since you asked me to look out for them, there have been so many things to learn, that I haven't had time to put anything down." Clearly, the research technique itself had so changed the outlook of the respondent as to make the data (had it been recorded) invalid.

Even though learners could not be used as sole informants their perception of their work was of interest in itself. Likert (1959) argues "an individual's reaction to any situation is always a function not of the absolute character of the interaction, but of his perception of it. It is how he sees things that counts, not objective reality" (p. 161). The learners' descriptions of situations in which they were involved, obtained during interviews conducted shortly after the events had been observed, whilst providing data on teaching which could be cross-checked against the researcher's observations, also gave some indication of the 'learning conditions' - of the learners' awareness that there was something to learn or discover in the surroundings. But it was important to realise that in collecting such data, the learners' state of awareness should not be changed (as happened to the pupil nurse). However, by asking learners about observed events, inferences could be drawn about learning conditions. It was not possible to ask a learner a direct question - "What do you expect to learn during this situation"? for such a question would alert the respondent to the possibility that there was something to learn.

Learners were used as informants about teaching or learning since it was assumed that some teaching was not readily observable and the very nature of learning is internal and invisible. Gagne (1974) warns that "the learner's own reports are not generally considered to be good sources of knowledge about learning" (p. 8) since learners are not aware of the internal processes. Nevertheless, it was found during the pre-testing that learners were able to report conversations and describe things which they had seen, done or overheard and give some indication of the way activities in which they were involved related to their education. No person, other than the learner, could do this, for each learner followed a different programme of training, visiting different wards and undergoing varying experiences.

Data Collection Techniques

The data collection techniques that were finally evolved were compromise solutions to innumerable problems which were encountered during the pre-testing period. The intention was to collect the maximum amount of relevant data on teaching and learning and ward organisation with the minimum of disruption of ward staff. The methods and techniques had to be economical as to research resources and capable of being used in wards with fluctuating workloads. It must be said in passing that continuous observation either of potential teachers, such as ward sisters or staff nurses, or of individual learners, was a wasteful use of researcher time (and embarrassing to those being observed) because there could be long periods when there was no teaching and little work, and therefore no positive data.

The observation schedule (Appendix 12) was designed to identify 'overt' teaching situations and 'potential teaching' situations (learner working with trained person) so that they could be probed in depth.

Activity sampling at 10 minute intervals gave an overview of the ward, yielding data on activities performed by ward sisters and other qualified staff members - (what they were doing and with whom they were interacting). Even if there was no overt teaching, the trained staff/learner activities were of particular interest because of the commonly held assumption that teaching occurs on these occasions.

Two systems of categorisation were used for recording nursing activities: one used 'Basic, Technical, Informational, Relational and Non-nursing' categories and was modelled on systems used by Goddard (1963) and Bendall (1973), and the other, which was used for sister activities only was developed from one suggested by Inman (1975) (Appendix 13).

Activities were recorded on the Staff Activity Sheet (Appendix 14). Categories of learner activities (i.e. what they were doing) were not recorded because of heavy demands on researcher time, but companions (i.e. who the learner was with) or the fact that the learner was alone were recorded, and overt teaching noted. An original intention to record the presence of doctors, consultants and trained nurses not attached to the ward, who were alone on the ward had to be abandoned during observations on the first ward since it was physically impossible to observe too many things. When doctors, consultants and others were with a member of the ward staff their presence was automatically recorded. (A special recording box had been included because on one of the pilot wards a consultant was regularly seen in one of the wards unaccompanied by the sister. This was a most unusual occurrence, but a similar situation was not observed in the main study.)

Interviews with Learners

On each ward a sample of learner activities were the subject of further investigation; learners being interviewed about activities in which they were involved (Appendix 15). One purpose of these interviews was to provide data on the quality and nature of the teaching and learning, but in eliciting this information the terms 'teaching' and 'learning' were never used by the researcher. Learners were asked "Were you told, or did you do, or see anything that you felt was important for your education?" The three components of the question were asked separately, and the learners prompted so that anything that they had experienced could be identified. The word 'important' had no special meaning and was used as a first step to encourage the learner to describe aspects of the activity which she felt were concerned with her education. Responses were recorded and categories of teaching and learning developed from them.

Where appropriate, data were recorded about teachers and teaching initiators, and some aspects of ward organisation probed. When observed in a 'work' activity learners were asked to assess their ability by selecting one of four scales printed on a card.

1. I feel fully competent and do not need further practice.
2. I feel competent but would like further practice.
3. I feel fairly competent but would like to be supervised, (i.e. have someone to watch and help if necessary).
4. I do not really feel competent and would like some more teaching and supervision.

Operationally a commonsense approach was used to identify work situations which were originally defined as "activities requiring mental or physical effort, directly or indirectly to satisfy the needs of patients". A learner was only asked to assess her competence in a

particular activity if such a request was reasonable. For instance, it was considered inappropriate to ask a learner who was sitting with a group of learners, who were talking together, to assess her competence when subsequent interview revealed a 'social' topic, but it was reasonable when she was talking to patients. The bulk of the work activities were basic or technical activities.

A brief questionnaire was also given to the sample of students and pupils to find out whom they questioned in order to elicit different types of information (Appendix 16).

Sampling Learner Activities

The method of sampling learner activities was strictly adhered to in order to allow valid comparisons to be made between wards. There were certain advantages to be gained by having only one observer (the researcher) in all the wards, for instance - any observer bias in the interpretation of categories was the same on all wards. Nevertheless, there was a danger that as the research progressed the order of priority for selecting activities could be forgotten or insidiously altered. To prevent this, the Observation Schedule (Appendix 12) was attached to the clipper board which was carried by the researcher, and the instructions contained thereon were re-read at the commencement of each observation session.

Purposive sampling of learner interactions was used, so that the maximum number of teaching situations occurring on each ward was included. Overt teaching situations were sampled first and in the absence of overt teaching by any member of staff (whether sister, doctor, learner, etc.) priority was given to a learner working with a trained person and thereafter to learners working with other learners or untrained members of staff. The sample of cases on each ward, therefore, reflected both the teaching that actually occurred on the

ward and the time learners spent with various groups. (For a further discussion of the effect of this method of sampling, see Appendix 19). Where more than one activity of the same type could be selected, selection was made on the basis of the learner's place on a rota. The researcher could only select an activity according to the order of priority laid down in the schedule. Where learners were working alone, the researcher could choose whether or not to sample an activity, and to a large extent, the decision was made in the light of the number of interviews with learners that were outstanding.

At the commencement of each 10 minute interval, data were recorded on the Staff Activity Sheet, and attention was then turned to a specific learner activity. It was rare to find more than one overt teaching situation or more than one activity in which a trained person was working with a learner, so selection of the appropriate activity presented few problems.

Once the learner activity had been selected, known details such as date or nurse number were recorded on the Activity Sheet (Appendix 15) and an Activity Number allocated to the incident. A brief description of the activity was made so that details could be related to the learner in order to facilitate identification of the incident. The researcher then waited for a suitable opportunity between activities to interview learners about what had occurred. All the learners had been told personally how the interviewing would affect them and were aware that the sister knew that they would be talking periodically with the researcher and had consented to this. All the learners on every ward consented to help. At the briefing they were also told to advise the researcher if it was not convenient to be detained for the three to five minutes the interview took.

In practice, the interviews were usually recorded within half an hour of the observation time, but when wards were very busy it became increasingly difficult to obtain interviews. However, there were only two occasions when interviews could not be obtained - in one case the learner could not recall the incident (making an empty bed) and on the other the learner went off duty and subsequently started night duty.

On one ward which had a very high workload, the system of interviewing learners undoubtedly placed a strain on senior learners, for the time needed for the interview stole the precious minutes between jobs when the student was collecting her thoughts to decide what to do next. Problems were encountered when one senior student who had originally co-operated in the research began to avoid the researcher. There appeared to be a real risk that the whole research could be placed in jeopardy, so the learner was approached informally to determine the nature of any problem and to see if any difficulties could be resolved. The ensuing conversation must remain a private concern of the researcher and the learner, but the result of this meeting was that the learner hence-forward gave considerable help to the researcher and outstanding interviews were completed. In a gesture of friendship, the learner offered a cup of tea which was accepted, but in the meantime a pupil who was due to be interviewed, went off-duty and could not be contacted for three days. Fortunately, the interview concerned a ward assessment and the learner had no difficulty in recalling the details of the incident. This was the longest period of time between observation and interview.

When wards were very busy in the morning sessions, the strategy for obtaining interviews was subsequently changed and sometimes learners were not approached until the end of the observation session. No further problems were experienced, but it was clear that this method of observation and interviewing could not have been tolerated on wards with very high

workloads for more than the five morning and five afternoon periods. Neither would it have been possible to use more than one observer in order to collect a larger sample of activities, because demands on learners would have been excessive.

Observation Times.

Observations commenced at the end of July 1976 and were completed early in December of that year. Certain specifications were made to ensure that all wards were observed under comparable circumstances. Observations only took place when the senior ward sister was on duty and periods when key members of the trained staff were on holiday were avoided - but no adjustments could be made for absence due to sickness.

Drawing largely on the data from sisters' interviews which had indicated that the heavy work periods were in the mornings, and slack periods in the afternoons, observations were conducted on five mornings between 9 a.m. and 12 noon, in order to detect the maximum amount of teaching which took place during work, and five afternoons between 2 p.m. and 4 p.m. in order to detect any teaching situations occurring when work demands were lighter. There had been no consensus of opinion about eveningsor weekends so these periods were not used. In order to observe the maximum range of ward activities (.e.g. doctors' rounds, 'operation' days) it was intended to observe on each of the five days of the week (Monday to Friday). This was not possible on two wards as the sisters regularly had the same off-duty, so mornings or afternoons with a similar time-table of activities were substituted.

Since the period of observation was limited, attempts were made to assess the validity of recordings. To this end, each member of the nursing staff was asked to complete a short questionnaire at the end of each session, so that marked variations in the ward routine, work or staffing could be noted (Appendices 17 and 18). The data collection

period varied from 2 - 6 weeks depending on the availability of the ward sister.

Sample of Learner Nurses

The sample of student and pupil nurses who were interviewed in respect of observed activities comprised learners who were working on the six wards at the time of the observations. Two students and one pupil were encountered on two wards because they had completed their allocation on one ward and commenced work on a second ward which was also being used for the observation stage. Two students from the Introductory Course were unexpectedly encountered on one ward - having been allocated to the ward for one day. Since some activities in which they were involved satisfied the criteria for selection, they were interviewed about the observed activities.

TABLE 21

STUDENT AND PUPIL LEARNERS IN TRAINING, OR AWAITING RESULTS - NOVEMBER 1976 AND SAMPLE OF LEARNERS IN STAGE 2.

Type of learner.	Number in training or awaiting results.	Number in sample.	%
Students	139	44	31.7
Pupils	58	11	19.0
Students and pupils excluding Introductory Course	197	55	27.9
Students in Introductory Course	19	2	10.5

In November 1976 there were 197 students and pupils (excluding those in Introductory Course) in training or awaiting results of examinations, who were allocated to work on wards and departments. A 27.9 per cent sample of these students and pupils took part in the second stage : 11 pupils and 44 students (Table 21).

TABLE 22

NUMBER AND GRADE OF LEARNERS IN THE SAMPLE OF SIX WARDS

Ward	Speciality	Rating	Student year 3.	Student year 2.	Student year 1.	Student I.C.	Pupil year 2.	Pupil year 1.
Neville	Medical	High	5	1	4	0	1	0
Irena	Medical	Low	3	2	3	0	2	0
Elizabeth	Surgical/ Gynaecology	Low	3	3	1	0	1	2
Charlotte	Surgical	High	1	1	3	0	4	0
Naomi	Orthopaedic	Low	2	5	2	0	1	1
Heaton	Orthopaedic	High	1	4	2	2	0	0

There were variations in the sample of learners on the different wards. The learners on the two medical wards tended to be more senior than learners on the two orthopaedic wards (Table 22), and there were more senior students on Elizabeth ward compared to Charlotte.

Seven students and 6 pupils had completed rating questionnaires in the first stage of the research but only two of these learners were working on a ward which they had previously rated.

THE RESEARCH ROLE - RELATIONSHIP BETWEEN THE OBSERVER AND THE OBSERVED

Careful consideration was given to the type of research role that should be adopted, and a number of decisions had to be made before the actual observations took place - such as what to wear, whom to help, what nursing work to do and under what circumstances. All were concerned in some way with the central issue of the relationship between the observer and the observed. How much, and what type of rapport must be established, in order to collect the required data? To what extent will the observer be noticed and how will this affect the observations?

Since the learners were going to be involved in frequent conversations with the researcher it was inevitable that her presence would be noticed. There was, therefore, no point in attempting to adopt any kind of 'aloof', 'fly on the wall' role such as had been used by Lelean (1973). The assistance of the learners, and co-operation of the trained staff, were essential for a successful outcome in terms of adequate, relevant data, so all decisions were made with the objective of establishing good rapport and relationships.

Conscious efforts were made to reduce any hostility between the researcher and ward staff. A friendly, non-threatening approach was adopted from the moment the first, tentative contact was made with the ward sister and a white coat was worn during observations so that the researcher would be more readily accepted by patients and available to give limited help to nurses should a suitable opportunity present itself. It was felt that occasional assistance, for instance in making an empty bed, might help to counteract any irritation that might arise due to nurses being taken from their work. In practice very little was done and the researcher only intervened to assist when help was obviously needed and there was no other person available. Lengthy involvement was not possible because of the strict observation schedule, but the type of help that could be given, included assisting an elderly patient who urgently needed to get to the toilet, helping a patient who was coughing and, occasionally, answering the telephone. Research demands always took priority and care was taken to see that nothing was done to distort what was being observed, particularly at the commencement of a ten minute activity sample period which occurred on the hour and at ten minute intervals thereafter.

The research created a lot of interest and questions put by patients and members of the staff were answered as truthfully as possible without disclosing the exact nature of observations and recordings. Opinions were often expressed about various topics connected with nurse education in general, and in relation to particular wards, but the researcher avoided doing anything to indicate alliance with specific groups, viz. trained staff or learners. Inevitably more time was spent with learners because of the interviews with them, but there were opportunities to engage in informal conversations with the sister and trained nurses whilst preparing lists prior to or after the actual observation sessions. Except for four or five occasions, lunch was usually taken in the canteen used for junior staff members rather than with sisters and more senior nurses.

On five out of the six wards, the researcher also accepted the sister's invitation to have coffee with her. Since it was not possible to leave the ward, such offers were accepted on the understanding that the researcher would have to leave after a few minutes in order to continue a strict observation schedule. On the sixth ward, the ward sister left the ward to have coffee, and the researcher was sustained by a thoughtful Asian domestic, who on noticing that no coffee break was taken, informed the researcher that a cup of coffee awaited her in the kitchen. During the afternoons, cups of tea were accepted from all who offered them - it was not unknown for the researcher hastily to consume tea with the sister only to be offered another cup by learners. Offers were always accepted, for hospitality extended and accepted, seemed symbolic of group membership. However, on one ward the researcher withdrew from a situation in which trained and learner nurses were about to enjoy a special lunch, which had been prepared by a Chinese student, because she felt that she was intruding. Some time later the student advised the researcher that part of the feast had been set aside for her. This gesture was welcomed, particularly because it was only the second day of observation on this ward.

Writers such as Denzin (1970 pp. 191 - 192), Pearsall (1971) and Schwartz (1971) have described the various stages through which an observer passes: the initial phase in which the observer is regarded with some suspicion to the final phase in which there is acceptance and rapport. In this study the first phase was surprisingly short with evidence of 'belonging' becoming apparent after two or three days. The outward signs varied from ward to ward, from being included in a 'sweep' to receiving chocolates and wine which were distributed in hierarchic order (the researcher being included above the learners with the sister and staff nurse!)

The researcher's presence was ignored insofar as ward activities were concerned. The most graphic evidence of this was seen on one ward at the beginning of afternoon observations. Just as the activity recordings were being made to show that all the learners were gathered together in the centre of the ward, the pattern of activity suddenly changed and every nurse appeared at the bedside of a different patient. A few seconds later, a senior nurse administrator arrived on the ward, confirming the fact that 'front stage' behaviour was not being presented during observations.

Suspicion was notable for its absence, but whether it would have been increased if the trained staff had known of the activity sampling cannot be known - although one sister did remark "I hope it's the nurses you're watching and not me." To which the reply was given, "I'm interested in a variety of things, but am looking mainly at the learners." Paradoxically, the sister who appeared to be most aware and suspicious of the researcher was the one who eventually emerged as the organiser of the 'ideal' ward. Cynics may conclude that ward organisation was altered to increase the amount of teaching but the 'validity checks' showed that no 'unusual' teaching activities occurred on this or any

of the wards. There was some possibility that knowledge of the research subject ('how nurses learn in the ward') would result in an increase in teaching - the well known 'Hawthorne effect' in which those being observed increase their job performance (see Roethlisberger R.F.J., and Dickson W.J., 1939), but if this was so, it was probable that the effect would be the same in all wards, because all sisters and members of the ward staff received the same information. What might be concluded, is that the teaching that was discovered was the maximum rather than the minimum. Certainly an explanation of 'how nurses learn' implied an interest in teaching and therefore the teachers.

Most of the notes required for the research (e.g. duty rotas, Kardex) were kept in the sister's office so much of the administration associated with the research was done in the office before and after each observation session. Completed sheets and spare copies of the various data recording sheets were kept in folders in a brief case which remained in the office. There were certain advantages in this since it afforded the researcher a legitimate excuse if access to the office was needed in order to record activities. However, on one ward, the ward clerk gave a clear indication that the office would be 'out of bounds' at the conclusion of the consultant's round by suggesting that the brief case be removed if it was likely to be needed.

On most wards the problem was generally one of avoiding participation rather than gaining access to prohibited areas. Invitations from one sister to don a mask and watch nurses perform particular skills had to be politely rejected because they would have interfered with other observations. It was also contrary to planned policy not to intrude on the patients' privacy by going behind screens, nor to put nurses under the undue strain of prolonged observations. Sufficient preliminary data could be obtained

for learner interviews by making brief observations and remaining within 'earshot'. An assurance given to learners that their behaviour was not being 'assessed' undoubtedly led to a lessening of tension, and the neutral, friendly role contributed to the establishment of good relationships.

CHAPTER TEN

WARD DATA

The Patients

The assistance of the ward sister was sought in the collection of data on patients in the ward, for each observation period,so that the ward workload could be calculated and the type of patient ascertained. The work on the ward derives from the patient so a record was required of the age of patients, length of time they had been in the ward and the type of diseases from which they suffered.

Age of Patients

The median age and upper and lower quartiles (Q1 and Q3) were calculated for each observation session, and for the overall observation period on each ward. The median was preferred to the mean since it was found that the latter could be distorted by a few extremely high or low values. The median age indicated that whilst observations were in progress, there was an equal number of patients with ages above and below the middle value, whilst the upper and lower quartiles showed that a quarter of the patients were older or younger respectively, than the given age. (Table 23).

TABLE 23

Sex and Age of Patients on Six Wards

Ward	Sex	Speciality	N.	Median age (years)	Upper quartile (years)	Lower quartile (years)
Neville	Male	Medical	50	64.8	71.5	56.5
Irena	Female	Medical	37	68.0	76.0	44.8
Elizabeth	Female	Surgical/ gynaecology	95	49.3	59.3	32.0
Charlotte	Female	Surgical	64	49.5	67.0	30.0
Naomi	Female	Orthopaedic	52	77.5	84.0	62.0
Heaton	Male	Orthopaedic	67	54.0	65.5	30.8

The median ages of the patients varied considerably from 49.3 years on Elizabeth ward to 77.5 years on Naomi. The surgical and medical wards were reasonably well-matched, but there were wide variations between the two orthopaedic wards. 39.3 per cent of the female orthopaedic patients suffered from fractured femur and 81.3 per cent were above 77.5 years of age. In contrast only 23.4 per cent of the male orthopaedic patients suffered from fractured femur and only 59 per cent of these were over 77.5 years.

Day since Admission

The actual length of stay of the patients, determined by the dates of admission and discharge were not readily available, so for each observation session, the number of days since admission was recorded for each patient. Thus a ward with a high turnover of patients had more patients on days 1 and 2, whilst wards with a low turnover had patients who had been in hospital for several weeks.

TABLE 24

Number of Days since admission for each ward.

Ward	Speciality.	N.	Median day since admission	Upper quartile	Lower quartile
Neville	Male medical	50	8.5	25.8	5.8
Irena	Female medical	37	13.0	29.3	6.0
Elizabeth	Female surgical/ gynaecology	95	4.8	12.0	2.0
Charlotte	Female surgical	64	5.0	7.5	2.5
Naomi	Female orthopaedic	52	13.0	24.0	6.0
Heaton	Male orthopaedic	67	10.5	23.0	3.5

As with the patients' ages, there were variations between wards but they were less marked (Table 24). These figures show that as far as patients' ages and 'day since admission' were concerned, there were more similarities between Naomi (female orthopaedic) and Irena (female medical) than there were between Naomi and the other orthopaedic ward (Heaton).

There is a relationship between the rank orders for the two variables - median age of patients and 'day since admission' (Spearman rank correlation coefficient 0.929, level of significance 0.05): the older the patients, the longer the period since admission to the ward.

The Ward Workload

The workload was calculated for each morning or afternoon observation session by assigning patients to care groups 1 to 5 according to their dependency (Chapter 9 pp163-5). Each patient was given a score equivalent to the care group number and the total workload index comprised the sum of these scores.

The amount of work, as denoted by the workload index, was related to the number of nurses and auxiliaries working on the ward during the observation session, in order to obtain a measure of the 'busyness' of the ward. Since the morning and afternoon sessions spanned three and two hours respectively, it was necessary to calculate the number of nurses on duty per hour and to divide the workload index by this figure, in order to obtain the workload per nurse per hour (Appendix 11). Untrained, voluntary workers such as schoolboys and girls, were not included on the staff rota, and mealtimes and time spent off the ward for coffee breaks or doing work not connected with the ward, were excluded from the calculations. The workload per nurse per hour, was roughly equivalent to the 'units per nurse' mentioned by Mulligan (1973 p. 31).

Tables 25 and 26 show that there were minimal variations in the workload indices for the morning and afternoon periods which ranged from 110 to 36 in the morning and 117 to 36 in the afternoon. But the workload per nurse per hour figures were generally higher in the morning because more staff were on duty in the afternoons due to an overlap in shifts with the consequence that each nurse had less work to do.

The median workload per nurse per hour was 12.48 in the morning and 9.46 in the afternoon. In order to give some meaning to these figures, comments made by members of staff and patients, (informally to the researcher, to each other or recorded on the sheets to assess 'typicality' of working conditions - Appendix 17), and recordings from the researcher's field notes were analysed and matched with the appropriate workload per nurse per hour figure. There appeared to be four degrees of 'busyness' both in the morning and the afternoon (Table 27), and although the ward workloads varied on the same ward and between wards, qualitative data from a variety of sources showed that there was general agreement in the opinions that were expressed at different levels of workload per nurse per hour (Appendix 20). For instance, during a session on a medical ward for which the workload per nurse per hour was 4.91 there was general agreement that the ward was 'quiet' and that there were 'more staff than usual' and observations suggested that there were too many nurses to do the work. Four nurses arrived to do the same bed bath and other nurses appeared to be uncomfortable because they had no work to do - when asked by another student if she was doing anything, a student replied, "No, I'm keeping out of the way."

TABLE 25.

Morning Workload per Nurse per Hour

(9 a.m. to 12 noon)

Ward	Day of observation	Workload index	Nurses per hour	Workload per nurse per hour	Rank
Elizabeth	4	110	5.45	20.18	1
Naomi	19	80	4.55	17.58	2
Charlotte	28	77	4.55	16.92	3
Elizabeth	5	90	5.45	16.5	4
Naomi	16	83	5.43	15.29	5
Elizabeth	3	89	5.89	15.1	6
Naomi	18	81	5.43	14.92	7
Heaton	23	80	5.55	14.41	8
Heaton	20	90	6.27	14.35	9
Irena	37	65	4.56	14.25	10
Elizabeth	1	79	5.56	14.2	11.5
Elizabeth	2	90	6.34	14.2	11.5
Heaton	13	65	4.77	13.63	13
Naomi	11	59	4.55	13.00	14
Naomi	10	64	5.13	12.48	15
					Median
Heaton	12	61	4.89	12.47	16
Heaton	24	77	6.43	11.98	17
Charlotte	25	65	5.55	11.71	18
Neville	33	51	4.67	10.92	19
Irena	40	59	5.45	10.83	20
Charlotte	22	59	5.83	10.12	21
Charlotte	21	56	5.55	10.09	22.5
Irena	36	55	5.45	10.09	22.5
Neville	32	51	5.56	9.17	24
Neville	43	41	4.56	8.99	25
Charlotte	27	49	5.55	8.83	26
Irena	39	53	6.34	8.36	27
Irena	42	46	6.34	7.26	28
Neville	35	37	5.45	6.79	29
Neville	38	36	7.34	4.9	30

TABLE 26

Afternoon Workload per Nurse per Hour

2 p.m. to 4 p.m.

Ward	Day of observation	Workload index	Nurses per hour	Workload per nurse per hour	Rank
Elizabeth	4	113	7.25	15.59	1
Naomi	15	73	5.00	14.6	2
Elizabeth	7	117	8.00	14.0	3
Charlotte	24	84	6.25	13.44	4
Naomi	16	83	6.51	12.75	5
Naomi	14	81	6.38	12.7	6
Naomi	9	67	5.63	11.9	7
Elizabeth	8	79	6.66	11.86	8
Heaton	22	74	6.83	10.83	9
Charlotte	26	70	6.23	10.57	10
Heaton	29	75	7.5	10.00	11
Heaton	30	69	7.00	9.86	12
Naomi	17	70	7.25	9.66	13
Heaton	13	63	6.63	9.5	14
Irena	37	64	6.75	9.48	15
					Median
Elizabeth	6	91	9.63	9.45	16
Heaton	23	75	8.00	9.38	17
Elizabeth	2	95	10.5	9.00	18
Irena	36	55	7.00	7.91	19
Neville	34	48	6.25	7.68	20
Irena	39	55	7.5	7.33	21
Charlotte	25	58	8.00	7.25	22
Irena	40	62	8.63	7.19	23
Neville	33	55	8.00	6.88	24
Neville	32	57	8.63	6.61	25
Charlotte	21	56	9.00	6.22	26
Charlotte	27	51	8.88	5.75	27
Irena	41	47	8.5	5.53	28
Neville	35	38	9.44	4.03	29
Neville	38	36	9.5	3.79	30

TABLE 27

Levels of activity in relation to the workload per nurse per hour. (See Appendix 20)

MORNING (9 a.m. to 12 noon)

Workload per nurse per hour	Category of activity
4.9 up to 10.0	Quiet
10 " " 12.5	Optimum (Work level tolerable)
12.5 " " 15.0	Busy
15.0 " " 20.18	Very busy (becoming increasingly intolerable).

AFTERNOON (2 p.m. to 4 p.m.)

Up to 4.0	Too quiet
4.0 up to 9.0	Quiet
9.0 up to 13.0	Optimum (work level tolerable)
13.0 up to 16.0	Busy

The optimum workload in the morning ranged from 10.0 to 12.5 units per nurse per hour, and in the afternoon from 9.0 to 13.0. At this level there appeared to be an adequate number of nurses to do the work and an absence of 'pressure'. One sister commented "I enjoyed myself. Had time to teach the nurses. We had more staff - it was quieter all round." Above 15.0 units per nurse per hour, nurses were observed going straight from one job to another, and both sisters and nurses were seen to be involved in two or three major jobs simultaneously - for instance, a staff nurse was seen leaving a patient whose wound she was dressing in order to take another patient to the operating theatre.

Elizabeth (female surgical/gynaecology) and Naomi (female orthopaedic) were the two busiest wards, both in the morning and the afternoon. (These were the two wards about which learners in Stage One had made a high percentage of spontaneous comments indicating that the wards had heavy workloads). For all the sessions there was a workload per nurse per hour above the median.

In describing the categories of activity it seemed applicable to use the terms 'tolerable' and 'intolerable' because there were times when nurses were busy but in control of events insofar as they could select which patient to care for first. For instance, one student said, "Mrs. X felt uncomfortable and her bed hadn't been done so we did her first. It's always like this on this ward - do what is most urgent first". But there were times when nurses were under pressure to do more than one urgent job simultaneously, with the result that one patient's care had to be suspended in order for care to be given to another. When the morning workload per nurse per hour rose above 15 units it seemed that working conditions became increasingly intolerable.

Comparing wards of similar speciality, the ward in each pair which had been low rated in Stage One had a higher median and mean workload per nurse per hour than the high rated one. On Charlotte ward (female surgical) most of the sessions fell in the 'quiet' and 'optimum' categories during the mornings, whilst on low rated Elizabeth ward, the ward was 'busy' or 'very busy' for all the morning sessions. Similarly, in the afternoons, there were no 'quiet' sessions on Elizabeth compared to three on Charlotte (Table 28). The workload on Elizabeth was consistently higher than all the other wards, since there were more patients, many of whom fell into care group 5 on operation days. The workload was intensified because a number of 'day cases' were admitted (patients admitted, operated on and discharged on the same day), and there appeared to be no extra staffing allocation to alleviate the extra workload which reached intolerable levels.

The medical wards were less busy than either the surgical or orthopaedic wards, both in the mornings and the afternoons. Neville (male medical) was exceptionally quiet in comparison with the other wards, with four out of the five morning sessions in the 'quiet' category. The

TABLE 28

Level of activity and mean workload per nurse per hour on six wards, during five mornings and afternoons

Morning (9 a.m. to 12 noon) No. observation sessions in each category

Ward	Speciality	WLNH mean	Quiet 4.9-10	Optimum 10-12.5	Busy 12.5-15	Very busy 15-20.2
Elizabeth	Fem.surg/gynae.	16.1	0	0	2	3
Charlotte	Fem.surgical	11.5	1	3	0	1
Neville	Male medical	8.2	4	1	0	0
Irena	Fem.medical	10.2	2	2	1	0
Naomi	Fem.orthopaedic	14.7	0	1	2	2
Heaton	Male orthopaedic	13.4	0	2	3	0

Afternoon (2 p.m. to 4 p.m.

Ward	Speciality	WLNH mean	Too quiet Under 4	Quiet 4 - 9	Optimum 9 - 13	Busy 13 - 16
Elizabeth	Fem.surg/gynae	12.0	0	0	3	2
Charlotte	Fem.surgical	8.7	0	3	1	1
Neville	Male medical	5.8	1	4	0	0
Irena	Fem.medical	7.5	0	4	1	0
Naomi	Fem.orthopaedic	12.3	0	0	4	1
Heaton	Male orthopaedic	9.9	0	0	5	0

WLNH = Work Load per Nurse per Hour.

workload per nurse per hour on Heaton (Male orthopaedic) did not vary to extremes but Naomi (female orthopaedic) was 'very busy' for two morning observation sessions and was the busiest ward in the afternoon mainly because there were fewer nurses to do the work rather than the workload itself being excessively high.

Ratio of Trained Staff to Learners

The ratio of trained staff to learner nurses was calculated for each morning or afternoon session during which observations were made. Obviously the more trained nurses there were compared to learner nurses, the greater the probability for a learner to be working or communicating with a trained nurse.

The code and grade of each nurse on duty was recorded on the 'Daily record of staff and workload' sheet at the commencement of each observation session, and the number of learner nurses to 1 trained nurse calculated. Thus, if there were 3 learner nurses to 2 trained nurses, the ratio was 3:2 which, when reduced became 1.5:1.By reducing the figures in this way it was possible to compare wards to see how many learners were on duty in relation to each trained nurse, during the morning and afternoon periods. (Table 29).

TABLE 29

Comparison of wards to show the ratio of learner nurses to trained nurses

Morning (9 a.m. to 12 noon)	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton
Ratio range of learners to 1 trained nurse	1.0-1.5	1.5-4.0	1.3-5.0	0.7-3.0	0.3-5.0	0.5-2.0
Mean ratio of learners to 1 trained nurse	1.3	2.2	2.3	1.4	3.1	1.2
Afternoon (2 p.m. to 4 p.m.)						
Ratio range of learners to 1 trained nurse	1.0-2.5	1.7-2.3	0.8-4.5	1.3-3.0	2.5-5.0	1.0-2.5
Mean ratio of learners to 1 trained nurse	1.8	2.0	2.0	1.7	3.4	1.4
Ward rating by learners in Stage 1	High	Low	Low	High	Low	High

Heaton (male orthopaedic), Charlotte (female surgical) and Neville (male medical) wards had fewer learners to each trained nurse during both morning and afternoon periods. (Learners in Stage One had rated these wards more highly than the other wards of similar speciality, i.e. Naomi, Elizabeth and Irena). However, during the afternoons, the difference in quality of staffing was less marked on the two surgical wards, but on Naomi ward there were over 3 learners to each trained nurse. Heaton had the most favourable, and Naomi the least favourable, ratio of learners to trained nurses, of all the wards.

These data show that on the three higher ranked wards in each pair (Charlotte, Neville and Heaton) the quality of staffing would tend to make more trained nurses available for teaching - although it does not necessarily follow that because more trained nurses are available, that they do the teaching on a ward. But in the case of Naomi ward, even though the sister and trained nurses might spend more time with learners, than the staff on Heaton or other wards, the learners would be able to spend less time with trained nurses simply because there were fewer trained nurses on duty with them. The point to be borne in mind, is that given the will, the trained nurses on Heaton ward had a better opportunity to emerge as the ward teachers, than their colleagues on Naomi.

The Six Wards - Summary of Ward Data

Medical Wards - Neville and Irena Wards.

The two medical wards, Neville and Irena, were both situated in St. Joan's hospital, were of similar design with 22 beds and the average numbers of patients during observation sessions were 18.9 on Neville (male medical) and 20.5 on Irena (female medical).

The patients on Irena ward were slightly older than those on Neville and had been in hospital for a longer period. The median ages were 68 years on Irena and 64.8 years on Neville, and the median day since admission 13.0 and 8.5 respectively.

Neville had the lowest workload per nurse per hour of all the wards both during the morning and the afternoon sessions, and Irena the second lowest.

There were more permanent trained nurses on Neville ward than on Irena: 1 senior sister, 1 junior sister, 1 staff nurse and 2 Enrolled nurses on the former, and 1 senior sister and 2 staff nurses on the latter. There were fewer learners to 1 trained nurse on Neville, the high rated ward of the pair.

Surgical Wards - Elizabeth and Charlotte Wards.

Elizabeth, a female surgical and gynaecological ward, was in St. Joan's hospital, whilst Charlotte, a female surgical ward, was in St. Anne's. The wards were of similar basic design, but Elizabeth had 35 beds compared to 27 on Charlotte - the extra beds being accommodated in an annexe off the main ward. There was an invisible demarcation line on Elizabeth ward which separated the surgical from the gynaecological patients. Whilst observations were in progress, the average number of patients being treated were 30.2 on Elizabeth and 22.8 on Charlotte.

The wards were well-matched since the patients were from similar age groups (median ages being 49.3 and 49.5) and stayed in hospital for shorter periods than those on the other wards (median day since admission being 4.8 on Elizabeth and 5 on Charlotte.)

Elizabeth was notable for the exceptionally high workload per nurse per hour in relation to the other wards, including Charlotte.

The permanent trained nurses on the duty rota were of similar grades - each ward having 1 senior sister, 1 junior sister, 2 staff nurses and 1 Enrolled nurse. Charlotte ward also had a part-time Enrolled nurse, and Elizabeth ward received the temporary help of trained nurses from a central pool. There were fewer learners to 1 trained nurse on Charlotte, but as on the medical wards, the differences in the ratios were less marked in the afternoons.

Orthopaedic Wards - Naomi and Heaton Wards.

The two orthopaedic wards, Naomi and Heaton, were both in St. Anne's hospital, were of similar structure and design and accommodated 23 patients. During observations the average numbers of patients on the two wards were 21.6 on Naomi and 20.7 on Heaton.

Apart from being under the control of the same consultant specialists, the patients on the two wards were not well-matched, since those on Heaton (male orthopaedic) were considerably younger than those on Naomi (female orthopaedic). Median ages were 54 on the former and 77.5 years on the latter ward. Patients on Heaton had not been in the ward as long as those on Naomi (10.5 days compared to 13 days)

The differences in the workload per nurse per hour were more marked in the afternoon than in the morning.

The permanent trained staff on Naomi comprised 1 senior sister, 1 part-time junior sister, 1 staff nurse and 1 Enrolled nurse (who was on holiday during part of the observation period), whilst on Heaton ward there was 1 senior sister, 1 staff nurse, 1 Enrolled nurse and 1 part-time Enrolled nurse. However, of the six wards, Heaton ward had the most favourable, and Naomi the least favourable, ratio of learners to 1 trained nurse during the observation sessions, and there were twice as many learners to 1 trained nurse on Naomi ward in comparison to Heaton.

CHAPTER ELEVEN

LEARNER NURSES AT WORK

Learner nurses are placed in the ward as 'worker /learners'. They are expected to do the work on the assumption that continual practice in a variety of work activities increases their competence. How competent did learner nurses feel in the work they were doing? Did they feel that they were 'workers' in the full sense of the word or did they feel that they were 'learners' who needed practice or supervision or teaching?

Observations were made on 56 learners in six wards and a total of 571 activities were explored (for categories see Appendix 13). Of these 459 were 'work' activities and with the exception of one 'non-nursing' and 9 'informational' or 'relational', they were 'basic' or 'technical' activities. Readers are reminded that the method of sampling activities was designed to include the maximum number of 'overt teaching' and work situations. In all the tables that follow the unit of analysis is an activity.

In respect of the work activities, learners were asked to select one of four statements which they felt applied to a particular work activity in which they had been observed.

1. I feel fully competent and do not need further practice.
2. I feel competent but would like further practice.
3. I feel fairly competent but would like to be supervised (i.e. have someone to watch and help if necessary).
4. I do not really feel competent and would like more teaching and supervision.

The results showed that, as far as the physical performance of the work was concerned, two thirds of the work activities were being done by learners who felt fully competent in that activity (67.1 per cent); in 22 per cent learners said they needed practice; in 7.4 per cent learners wanted supervision and in only 3.5 per cent learners said they required teaching.

Having assessed a work activity, learners were asked why they selected a particular scale for it (Table 30). 64 per cent of the learners who felt 'fully competent' indicated that the work was 'routine' or that they did it daily or often. The following comments are typical of the responses:

"I do it every day - two or three times or more."

"It's a daily activity, there's nothing to learn."

"It's a daily occurrence and there's nothing unusual about him."

"I don't need to see the card. It's the same as before, I do it every day."

"A routine case, no sores - completely routine."

TABLE 30

Reasons given by learner nurses for placing a work activity on a scale

Assessment of competence	Scale 1 Fully competent.	Scale 2 Need practice.	Scale 3 Need supervision.	Scale 4 Need teaching.
Number of activities	308	101	34	16
	%	%	%	%
Reasons for assessment				
Routine/repetitive work	64.0	2.0	0	0
Previous long experience	15.2	6.9	2.9	0
Easy work	11.7	2.0	0	0
Learning continues	0	12.9	0	0
Variation in patients	0	18.8	0	0
Infrequent work	0.3	18.8	26.5	50.0
Uncertain of ability	0.3	19.8	35.3	31.3
Fear of mistakes	0	3.0	20.6	18.8
No reason/other	8.4	15.9	14.7	0

Learners gave a variety of reasons for needing further practice in any one activity. 12.9 per cent said either that there was 'always something to learn' or indicated that it would be 'big-headed' to say that they were fully competent. In 18.8 per cent of cases learners felt that they needed further practice because of the patient.

"I need practice lifting people different ways - with different disabilities."

"Sometimes she's not steady - she's a difficult patient."

"I don't feel confident enough to put patients with 'Pin and Plate' back to bed."

"She's different every day - alters from day to day. I take her carefully as I find her - sometimes she's difficult."

Thus straightforward or routine work became a learning situation in which the learner needed practice, because a patient was perceived as being 'different' in some way.

The need for teaching or supervision generally arose because work was infrequent, because the learner felt uncertain about her abilities or because she was fearful of making mistakes. (Table 30).

"I would like to have someone there in case I do something wrong."

"I need more practice passing the tube. It may go into the lungs so I want someone there to see that it is in the right place."

"At my stage I don't feel at all competent. I've seen it but I need some supervision and help. I definitely need someone there all the time - for the patients sake."

"I'm quite scared of giving medicines. I like someone more senior to go with me."

However, fearful or insecure learners were in a minority and such sentiments were expressed in only 2.3 per cent of the work activities.

The learners' feeling of competence was related to the frequency they performed the various tasks - the more they did the work the more competent they felt. (Table 31).

TABLE 31.

Learners' feeling of competence in relation to the frequency of task performance

Number of activities	Very often 269 %	Quite often 113 %	Not very often 77 %
Scale 1 Fully competent	82.9	54.9	29.9
Scale 2 Need practice	14.9	35.4	27.3
Scale 3 Need supervision	1.9	6.2	28.6
Scale 4 Need teaching	0.4	3.5	14.3

In 82.9 per cent of the repetitive work (work performed 'very often') learners felt 'fully competent' and did not need further practice. But they also felt 'fully competent' in almost a third of the infrequent activities.

When talking about their work many learners used the terms 'routine', 'everyday', 'ordinary' and 'basic' synonymously. Work which was done everyday, on all wards, was the basic work and because it was the basic work learners felt fully competent doing it.

"All these things are just basic aren't they?"

"I've had plenty of practice on other wards - it's basic."

Thus, in the majority of basic work activities 84.8 per cent of nurses felt fully competent, but in over half the technical activities they needed either practice, supervision or teaching. (Table 32).

TABLE 32

Learners' feeling of competence in basic and technical work.

Number of activities.	Basic work 256 %	Technical work. 194 %
Scale 1 Fully competent	84.8	44.8
Scale 2 Need practice	13.3	32.5
Scale 3 Need supervision	1.2	15.5
Scale 4 Need teaching	0.8	7.2

When these data were analysed by ward, no marked differences were found; learners on all wards felt more competent doing basic rather than technical work. On the two medical wards (Neville and Irena), no teaching or supervision was felt to be needed during basic work, and in only 6.1 per cent of these activities on Neville and 2.1 per cent on Irena did learners say that they needed the practice. This is rather surprising since the sample of cases on both wards included activities being done by learners, on their first ward, who would have had little previous experience.

It seemed that learners were socialised to believe that it was the technical rather than the basic work that was important for their education. In 84 per cent of 194 technical activities, the learner participating in the activity felt that it was important for her education, compared to only 42.4 per cent of the 256 basic activities.

It was clear that the learners on all wards felt that the basic work could be readily mastered after two or three performances and thereafter it became routine work because of its frequent repetition. It became, as one nurse explained, 'second nature', and it was not unusual to find learners in their first or second week on a new ward, referring to such work as 'just routine'. Some indication of the speed of the

socialisation can be gleaned from the remarks of a student in her third week on her first ward. Referring to a 'liver biopsy' trolley she was helping to assemble, she said she needed teaching, and explained that it was important to be doing it, "It's not something you do every day - some things become automatic." Thus, in a space of two weeks, this learner inferred that she did some work automatically, without thinking about it.

Daily activities were labelled 'routine', were performed automatically and were perceived as having no part in the learners' education unless they were rendered 'unusual' in some respect. The type of patient in the ward appeared to affect the learners' perception of the work. Learners were asked "Are you doing anything that you feel is important for your education?" When responses relating to basic nursing activities were analysed, a relationship was found between the length of time the patients had been in the ward and the percentage of basic activities that were believed to be important for nurse education. (SROCT 0.843, significance level 0.05).

The longer patients had been in the ward, the less likely were learners to feel that the basic work was important for their education. (Table 33).

TABLE 33

Relationship between learners' perception of basic nursing work and patient stay in hospital

Ward	Speciality	Basic work activities felt to be important for education			Patient stay Median day since admission	
		N	%	Rank	%	Rank
Neville	Medical	33	57.6	3	8.5	3
Irena	Medical	47	21.3	6	13.0	5.5
Elizabeth	Surgical	31	58.1	2	4.8	1
Charlotte	Surgical	35	62.9	1	5.0	2
Naomi	Orthopaedic	63	41.3	4	13.0	5.5
Heaton	Orthopaedic	48	29.2	5	10.5	4

N = number of activities

The patients on the two surgical wards were in hospital for shorter periods than patients on the other wards, and learners doing approximately 60 per cent of the basic work activities felt that they were important. It appeared that on the surgical wards, basic work was less likely to be performed 'automatically' because of the variety of patients with a variety of surgical conditions.

Differences in the patient stay partly explains the marked variations in the responses of learners on the two medical wards, Neville and Irena. Learners on both medical wards felt fully competent in the performance of over 90 per cent of the basic work activities, but whilst learners on Neville felt that 57.6 per cent of these activities were important for their education, the corresponding figure for Irena ward was only 21.3 per cent. There was a higher turnover of patients on Neville where the patients 'median' day since admission was 8.5 compared with 13 on Irena.

However, the length of patient stay does not explain the variation in the responses of learners on the two orthopaedic wards, Naomi and Heaton. The results from Heaton ward are surprising for it was more highly rated than Naomi, by the learners in Stage 1, the patients stay was shorter (the median 'day since admission' being 10.5 compared to 13 for Naomi) and yet the percentage of basic activities which learners felt were important for their education was 12.1 per cent less than Naomi's. (Naomi 41.3 per cent, Heaton 29.2 per cent).

Patient variables do not account for the difference in responses from learners on Irena (female medical) and Naomi (female orthopaedic), for although there are marked similarities in the type of patient in these two wards (age, sex and patient stay - Chapter 10) twice as many basic activities on Naomi were felt to be important for education compared to those on Irena (41.3 per cent compared to 21.3 per cent).

Thus, although patient stay is a variable it is not the only one. The percentage of basic activities felt to be important for education on Heaton and Irena wards are low when compared with the other wards and it will be argued later that the learner's attitude to work was rooted in the style of management of the ward sister and in the organisation of the work. (Chapter 13).

Learners' perception of the technical work which was relevant to their education was not related to the type of patient (SRCOT 0.586, not significant), but this type of work was felt to be very important for the learners' education. A high percentage (71.1 - 92.5 per cent) of technical activities which were sampled on the six wards were said to be important for the education of the learners who were engaged in them, and on all wards the percentage was substantially higher than the corresponding figures relating to basic activities. In other words, technical activities were to do with education,and basic activities were perceived as 'work.'

It is also interesting to find that there is a relationship between the perception of the first sample of learners (in Stage 1) of what they felt they had learnt on the wards, and the percentage of technical work activities which the second sample of learners believed were important for their education (SRCOT 0.886, level of significance 0.05) suggesting that it was the technical rather than the basic work that determined the learners' assessment of ward learning situations (Table 34). (The relationship with the basic work activities is not significant.)

TABLE 34

Ward ranking according to learners' perception of technical work activities felt to be important for education and an assessment by learners of what they had learnt on wards. (Two samples of learners).

Ward	Speciality	Technical work activities felt to be important for education			Ranking according to Stage 1 learners' assessment of learning.
		N =	%	Rank	
Neville	Medical	41	87.8	3	2
Irena	Medical	38	71.1	6	5
Elizabeth	Surgical	45	82.2	4	4
Charlotte	Surgical	40	92.5	1	1
Naomi	Orthopaedic	24	79.2	5	6
Heaton	Orthopaedic	24	91.7	2	3

N = number of activities.

When the pairs of wards are compared, the ward in each pair which was more highly rated in Stage 1 (Neville, Charlotte and Heaton) achieves a higher ranking in the order produced from the percentage of technical activities felt to be important for education. Furthermore, these three wards occupy the first three places in both rank orders. Charlotte ward is ranked 1 in both rank orders and also had the highest percentage of basic activities which were felt to be important for education. The seeming importance of technical work to the detriment of basic work on Heaton is the probable explanation for its previous high rating. Irena ward which was low rated by learners in Stage One is ranked 6 both for technical and basic work felt to be important for education.

Many learners described how they benefited from the work they were doing whilst others remarked only that it was important for their education and gave no explanation. A second year pupil who was taking a patient to theatre said that she was 'getting the experience' but others were more specific, especially in respect of technical work.

"Yes, I was trying to reassure the patient when she was having blood taken.... I felt as if I was helping her. It's important for the patient, but important to be doing it." (First year student)

"You have to do this and learn as you go along. Checking is vitally important." (First year student checking Controlled Drug.)

"I was reassuring the patient and helping her and not forcing her to hold it. I enjoy doing that kind of work." (Second year student helping a pupil nurse to give an enema).

"I have been packing with Eusol.... It's a challenge to pack something - I use metal forceps rather than plastic forceps." (First year student packing an anal wound).

Learners were less inclined to explain how basic work became important but a minority referred to the patient's needs.

"I had to make sure that the patient was sitting safely" (Second year pupil assisting patient to a chair).

"She's old and may fall. I must learn how to hold her so that she won't fall". (First year pupil assisting patient to commode).

"It brings you into contact with the patients' daily needs." (Second year student giving out meals).

However, despite the 'patient centred' approach of a minority of learners, basic work was felt by nurses at all stages of training to be less important for their education than technical work. Over 90 per cent of the technical activities undertaken by first and second year learners, and 64.3 per cent of those done by third year learners, were felt to be important for their education. Regarding the basic work, apart from that

done by nurses from Introductory Courses who had not yet been assigned to wards as 'workers', or on their first ward, less than half these activities were felt to be important. (Table 35 and Figure 2).

TABLE 35

Percentage of basic and technical work activities felt to be important for education by nurses at varying stages of training.

	Introductory Course		First ward		Year 1		Year 2		Year 3	
No. of nurses involved	%	2	%	6	%	11	%	23	%	13
Basic activities	100	(3)	63.2	(19)	32.4	(68)	48.1	(106)	34.4	(61)
Technical activities	100	(4)	96.4	(28)	95.5	(44)	90.9	(66)	64.3	(70)

Number of activities for each sub group shown in brackets.

N.B. Very small sample of cases for 'Introductory Course' and relatively small sample for 'First Ward'.

When answering the question, "Are you doing anything that you feel is important for your education as a nurse?", many senior nurses indicated that the basic work they were doing would have been important were they on their first ward or in their first year, as the following responses will illustrate.

"No, not really. The first time it might have been, but not after three years." (Third year student washing an incontinent patient.)

"If I was more junior, or in my first surgical ward, yes. As I am now, no - in my third year." (Third year student getting patient out of bed).

However, the first year nurses did not generally regard this type of work as having any relevance to their education. Fewer first year nurses (other than those on their first ward) than second and third year nurses indicated that the basic activity they were doing was important for their education. Figure 2 and Table 35 show that after the first ward there was a sharp drop in the percentage of activities felt to be important (32.4 per cent). The corresponding percentages of positive responses from second and third year learners were 48.1 and 34.4 per cent respectively.

Furthermore, the explanations which many learners gave indicated that they were unlikely to be seeking learning opportunities, for they regarded this type of routine work as a 'job to be done', rather than a learning situation, as these comments illustrate.

"No, I was just interested in getting her back to bed." (First year student).

"No value for my education, it's just a job that needs doing." (First year student emptying urinals).

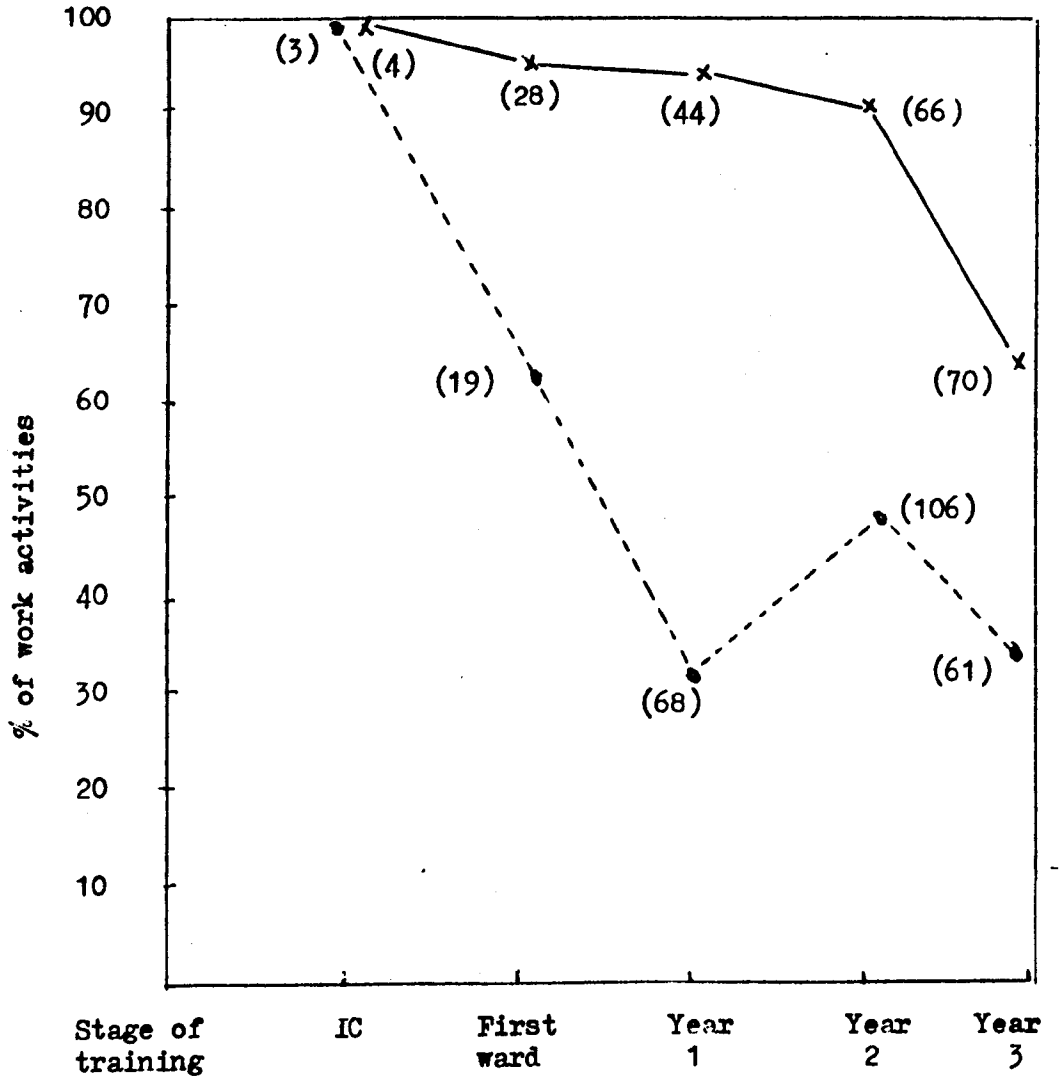
"To begin with it was. I've done it so many times, now it's just a job." (First year student doing pressure area care).

"Not really, I was just carrying on with the work. It's not really adding to my education - not really anything new". (First year student bed-bathing an elderly patient because "She was the only one left and I automatically did it.")

"On anybody, it's something you just do". (First year student doing pressure area care.

The comments and responses of the second and third year nurses indicated a similar approach to the work. But although the basic work was not usually seen to be an important part of the learners' education, many were eager to acknowledge that it was important for the patient.

Figure 2 Percentage of basic and technical work activities felt to be important for education by nurses at varying stages of training



Number of activities are shown in brackets

The work they were doing did not satisfy their needs as learners, but as workers they were satisfying the needs of the patients.

(First year pupil giving a drink to a patient). "No, it's a job of work - it's important for the patient."

(Third year student giving mouth washes) "It's not important for my education, but it's very important for the patient. It gets neglected on other wards - it's the only ward doing it regularly.

(Third year student attending to pressure areas). "I know what I'm doing, it's important for the patient not for me."

(Second year student attending to pressure areas) "I know it's important for Mrs.... Not really for my training - I know about pressure sores and so on.

(Third year student) "The questions are not really applicable to senior nurses like me. There's not much to learn after eighteen months. Lots of things you do are important for the patient but not for education."

The bulk of the basic, repetitive tasks were perceived as 'work' whilst the unusual or technical activities were an important part of training or education. Learning expectations varied according to the job. A first year student who was bed bathing a patient explained that it was not important for her education, and gave some indication of the type of activities that were.

"No, it was very straightforward - we don't do dressings or anything in the morning.... It's just hard work in the mornings."

There were innumerable comments from junior learners to confirm the importance of technical work. "Yes, doing it was important - catheterization is something different", said a student on her first ward. But as students became more senior there was less certainty about the relevance of the work and some had difficulty in responding.

"It's difficult, because I've done it so many times. I may not be re-educating myself any more. I may be re-educating myself as I remind myself - but I don't think so. I must not get complacent, because I may miss something." (Third year student taking blood pressure).

Some technical work had been done so often that to a minority of nurses it too became a purely work activity since nothing unusual or different had been encountered. A second year student giving out medicines gave a typical response.

"I was not doing something I didn't already know. I didn't learn anything I didn't know. I just gave out medicines."

But other senior learners were alert to unusual experiences. A third year student explained that taking a patient to theatre had been important for her.

"Every time I go down, something different happens."

There were variations in the responses from individual nurses, and also between wards, but what must be stressed is that nurses at varying stages of training, on every ward gave replies which showed that a higher percentage of technical than basic activities were felt to be important for education. The trend was consistently present despite small sub-samples

Two wards, Irena and Heaton, were identified earlier for having a low percentage of basic activities which were felt to be important for education. Comparing the results of Irena with Neville (the more highly rated medical ward), fewer basic activities being done by learners at each stage of training on Irena were felt to be important for education. It was startling to find that no basic activities being done by third year learners on Irena were felt to be relevant to education (18 activities) compared to 62.5 per cent of the 16 activities on Neville ward. Whilst on Neville ward, the trend was for the basic work to appear more relevant as the seniority of the learner increased on Irena the reverse happened and there was an undercurrent of dissatisfaction.

One third year student, when asked how often she did a specific basic activity, replied, "Too often".

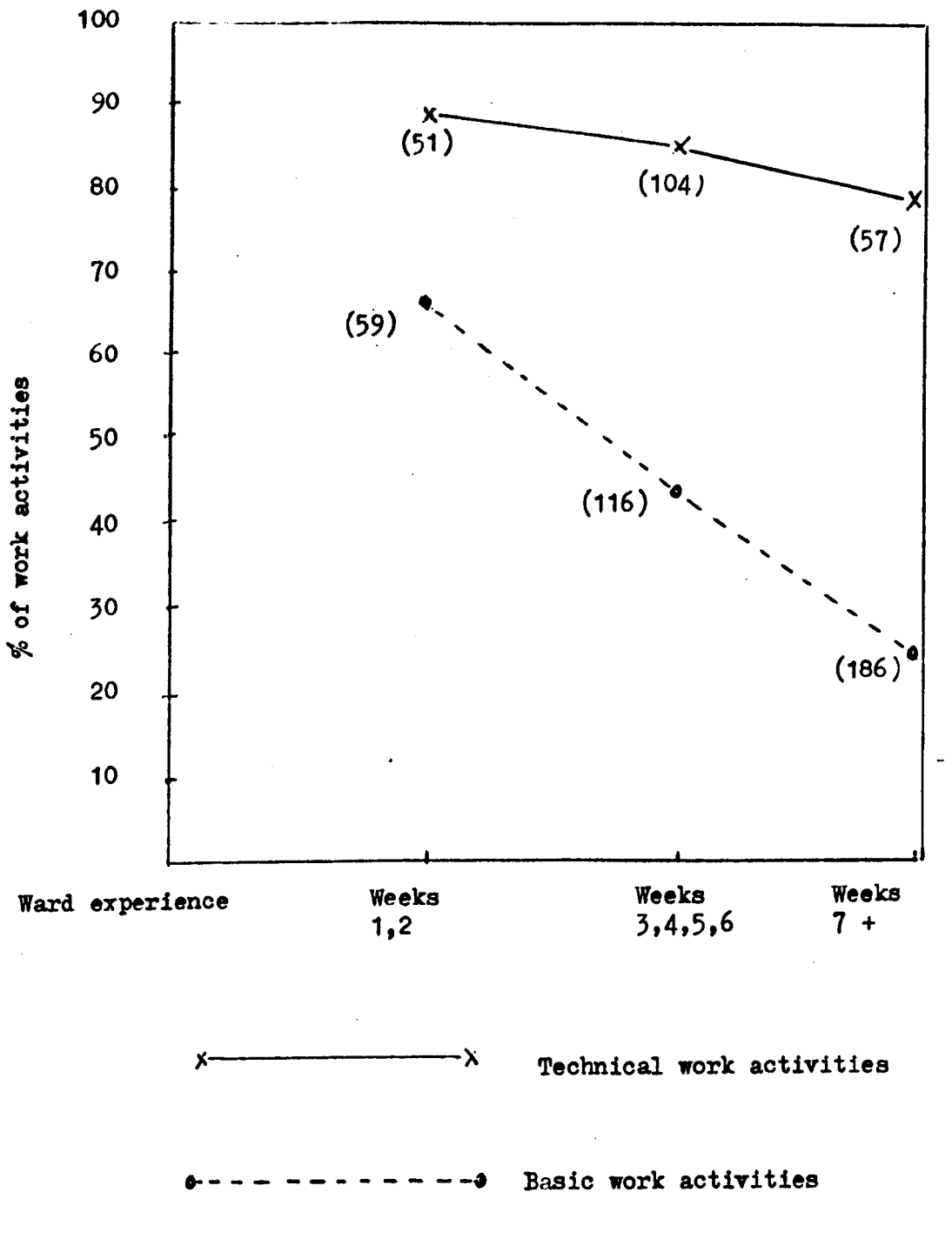
Comparing the two orthopaedic wards, the percentages of basic activities felt to be important for education by learners at each stage of training on Naomi were consistently twice as high as the corresponding percentages recorded for Heaton ward; an unexpected finding in view of Naomi's previous low rating.

Nurses in the sample had varying periods of experience in the wards on which observations were made. Data were analysed to see whether the learners' perception of their work changed over time - did the work appear less relevant the longer learners worked in a particular ward? The results are shown on Table 36 and Figure 3. A higher percentage of technical than basic activities were felt to be important for education by all groups of learners: 88.2 per cent for learners with one or two weeks experience, 84.6 per cent for learners in weeks three to six inclusive, and 78.9 per cent for learners who had worked on the ward for over seven weeks.

The corresponding percentages for the basic activities were lower, and the longer nurses had worked in the ward the less they responded that the basic work they were doing was important for them. Although 66.1 per cent of the basic activities done by newcomers were seen to be important, less than a quarter (24.4 per cent) of the basic activities done by nurses who had been on the ward for over seven weeks, were felt to be concerned with their education.

Despite the smallness of some numbers, when data from the sub-samples of learner nurses with differing periods of experience on the six wards were analysed separately, the percentages of technical activities felt to be important for education were higher for all groups than those for basic activities, with the exception of the new-comers on Irena. (the sub-sample was only 3). Of particular interest were the low percentages of basic

Figure 3 Percentage of basic and technical work activities felt to be important for education by nurses with varying periods of ward experience



Number of activities are shown in brackets

TABLE 36

Percentage of basic and technical work activities felt to be important for education by nurses with varying periods of ward experience.

	Weeks 1 and 2 %		Weeks 3, 4, 5, 6 %		Over 7 weeks %	
Basic activities	66.1	(59)	43.1	(116)	24.4	(186)
Technical activities	88.2	(51)	84.6	(104)	78.9	(57)

(Number of activities for each sub-group shown in brackets)

activities, undertaken by learners with over seven weeks experience on Irena (low rated medical) and Heaton (high rated orthopaedic), which were felt to be relevant to education (12.5 per cent - 32 activities and 8.0 per cent - 25 activities respectively). In contrast, on Naomi (the other orthopaedic ward on which patients stayed on the ward as long as those on Heaton and Irena) the learners seemed to find the basic work almost as important for their education, as the technical work.

Overall, these results suggested that it was during the technical work, rather than the basic work that learner nurses expected to learn. Nurses often expressed surprise at being asked whether the basic or repetitive work they were doing was important for their education. A third year student pointed out the seeming irrelevance of the researcher's questions.

> "I don't think your questions are suitable for third year nurses. You should ask about theory and setting up trolleys and special procedures - not just about ordinary work. You should have been here two weeks ago, we had a patient on dialysis."

When asked how often there were patients 'on dialysis' in the ward, she replied, "Not very often, they come in spates, two or three times a year". Other third year students also stated or implied that questions

about routine work were 'irrelevant for senior nurses', and a first year student explained her own dilemma of how to equate the performance of a task which had become 'automatic' to her education.

> "I suppose learning is reinforced every time we do something, but on some wards you fall into the routine and don't think about it."

However, she had a clear idea of what she believed was relevant, for she later drew the researcher's attention to a technical activity she had been doing, after observations had ceased.

> "You should ask about what I've just been doing. I've seen someone put on traction."

It was apparent from informal conversations with both trained and learner nurses, that they believed that the most appropriate times to observe educational opportunities were the occasions when something 'out of the routine' occurred.

> "A month ago there were patients on ventilators and peritoneal dialysis." (Second year student).
>
> "You should have been here at the weekend. We were extremely busy and had a lot of emergencies." (Trained nurse on surgical ward).
>
> "Oh, you should have been here early in the week, and last week when I was on holiday - we've had 'cardiac arrests' and 'haematemisis' - been really busy". (Trained nurse on medical ward).
>
> "You should have been here yesterday. We had a man with oesophageal varices and he bled and bled and bled - and he died and the day before that a man arrested." (Second year student).

It will be recalled that a minority of work activities did not fall into the basic or technical categories. Although data from these activities cannot be quantified there are some interesting features to note. The one non-nursing activity was a routine cleaning job which was 'routine on Friday'. The first year learner said that it was not important for her education because it was "cleaning - nothing special," and she felt 'fully competent' because the task was "easy" and she "did it at home." The response was, therefore, similar to many given in connection with a basic activity.

Six learners were observed talking to patients and all said that it was important for their education. Three felt 'fully competent' talking to patients and three 'needed practice'. Three learners said that they were talking to patients because the "work was finished" or "there was nothing else to do", but whatever the reason for the encounter it appeared that patients were taking the opportunity to remove uncertainties about their illnesses or to seek reassurance.

> "Mr. B. was worried about 2 per cent sugar in his urine and when it dropped he wanted to know why."
>
> "The doctor hadjust taken some blood and he felt nervous. It's very important, if you don't know the temperament of the patients you can't do the work. These are some of the best patients in the ward and are easy to talk to."

But not all patients were easy to talk to. Two learners expressed doubts about what they should say to patients. A third year student who had been asked a question by a patient, indicated her strategy.

> "If I can answer simply I do, otherwise I refer the question to staff nurse or sister. It's a bit difficult because only as you get more senior can you answer questions. Trained staff do it so you don't get as much practice as baths and bedpans and so on."

A pupil had also experienced problems about what to say to patients. Recalling an incident in which she had been comforting a weeping patient she explained

"I can comfort a patient but I don't really know what to say. Another patient was upset because she had lost a baby. She wanted to know if they did tests and I wasn't sure."

Not all learners talked only to the convalescent patients. At least one senior student was observed talking to a dying patient in preference to doing her own studying in a quiet session and she was also observed talking to an elderly patient whom she had earlier been helping to walk. Remarking that the patient was well mentally she commented that it was important for the patient,

"I get plenty of practice and I like doing it."

Two first year students were observed writing the Kardex and both experienced difficulty in communicating information.

"I asked the staff nurse what I should do for some of the difficult things and she told me. So far it is my first time and I want more practice."

It appeared that the learners' involvement in routine work could inhibit an awareness of what was occurring in the ward.

"The staff nurse reminded me about a lot of things that had happened. You are so busy doing bedbaths that you miss some things. I want someone there to remind me. I don't want to miss out something important. You need higher authority because you don't always know what is going on."

Other 'informational' and 'relational' activities could not be classified as work activities. On all wards, between 80 and 100 per cent of the 60 informational activities were described as being important for the learners' education - an expected finding bearing in mind that the method of sampling activities was designed to include teaching activities,

and the formal teaching sessions were included in this classification. (Activities in which groups of learners were talking together were also sampled, although conversations could not always be overheard.)

The majority of the informational and relational activities were sampled during the afternoon periods, when mainly due to the overlap of shifts more staff were on duty, with the consequence that there was a fall in the workload per nurse per hour. On all except Naomi ward, there were occasions when either formal teaching sessions took place on the wards or learners congregated around a table or a bed to discuss topics with each other. In the absence of overt teaching many of these latter activities were recorded as 'relational' and the subsequent interviews with the learners revealed what took place. Only Neville and Heaton wards had more than three relational activities in the sample. 68.8 per cent of the 16 activities on Neville and 61.5 per cent of the 13 activities on Heaton were felt to be important for the learners' education. In other words, the topics being discussed were not always of an educational nature, and some learners found difficulty in assuming a 'learner' role in the centre of a ward full of patients.

> "I was half listening to what the student and SEN were saying about assessment and about the kind of questions asked. I'm not really doing anything for my education - it's a bit helpful but not all that helpful. It seems so boring - a lot of staff on and not much to do. I keep meaning to bring one of my own books." (Student on first ward).
>
> "It's not important for my education. I could have studied - it's up to us. You get to know the girls you're working with and that's important." (Third year student)

Another first year student preferred not to join in discussions because "most of the discussions go over my head."

However, learners concerned in many of the informational and relational

activities were able to identify items of educational importance which they had seen or heard - (these are discussed in Chapter 12).

Summary

Data discussed in this chapter support Working Hypothesis 9 (p. 114) which was formulated at the end of Stage One. "Basic nursing activities are perceived as 'work' rather than 'learning' activities."

There seemed to be a consensus of opinion on the type of work that was important for education - namely the technical work. 84 per cent of technical activities were being done by learners who felt that it was important to be doing this type of work, and in over half the activities, the learners felt that they needed the practice, supervision or teaching. In contrast, the majority of the routine, repetitive basic nursing activities (84.8 per cent) were being done by learners who felt fully competent (and therefore did not need the practice), and only 42.4 per cent of these activities were felt to be necessary for the individual's education. As far as the physical practice was concerned, the nurses were 'learners' when doing most of the technical work, and 'workers' when doing the bulk of the basic work.

It does not necessarily follow that because learner nurses felt fully competent in the practical exposition of routine basic nursing work that nothing else of educational importance would be noted. However, it will be demonstrated in the succeeding chapter that although the sample of cases comprised a higher percentage of basic activities, the work activities during which teaching occurred, or in which learners saw or heard something of educational importance, were more likely to be of a technical nature.

CHAPTER TWELVE

TEACHING AND LEARNING IN HOSPITAL WARDS

The empirical data for this chapter is mainly drawn from two sources - 10 minute activity sampling, and interviews with 56 learners about 524 activities observed on six wards (See chapter 9 and Appendices 12 and 19). The reader should note that in most of the tables referring to teaching and learning the unit of analysis is an 'activity'.

The sample of learner activities contained only a small percentage of activities in which a learner nurse was alone, since an assumption was made that teaching was an activity involving two key people; one who could be identified as a teacher and one a learner. Lone learner activities were only sampled when other types of activity were unavailable and when time permitted. Since the method of sampling this type of activity varied from ward to ward, data from these cases is not included in tables and discussions in this chapter unless specifically mentioned.

A key objective of the observation stage of the research was to describe the teaching/learning situations occurring on six different wards. All categories of teaching and learning emerged from the data and are discussed in some detail on pages 224 - 233. It was clear that teaching and learning varied at different times and under different circumstances. Some of the variables were outside the control of the ward sister; thus teaching and learning varied with the type of work (pp 237/8), the frequency of job performance (pp 239 - 240), the experience and stage of training of the learner nurse (pp 241-245) and the member of staff with whom the learner worked or associated (pp 246 - 247). However, variations in teaching and learning on wards of the same type could, in part, be explained by factors which fell within the control of the ward sister; her style of leadership, ward organisation and orientation to her role (Chapter 13).

Categories of Teaching and Learning

In order to identify teaching/learning situations, learners on six wards were asked about their experiences during specific activities - "were you told, or did you see anything which you felt was important for your education?". The terms 'teaching' and 'learning' were never used by the researcher since learners' perception of these concepts could differ widely, but learners often used these words when giving their replies. In each case an effort was made to find out the nature of any conversation which had occurred.

It is important to note at this stage, that no attempt was made to assess the quality or effectiveness of any teaching/learning situation, but insofar as learners were able to repeat knowledge which they had heard or overheard, describe skills which they had observed, or demonstrate an awareness of patients' feelings, it was reasonable to conclude that some teaching or learning had occurred.

Responses showed that there were three types of situation - those in which there was no teaching or learning, teaching situations and learning opportunities. In the first type of situation learners were unable to describe anything which they had seen or heard which they felt was important for their education; in the second type it was clear that knowledge or skills had been transmitted from someone who could be identified as teacher; - and in the third type learners had an opportunity to experience something which they felt was important for their education, but no teacher was identified.

Learners' responses to the question "Were you told or did you see anything which you felt was important for your education?" yielded data on the nature of their experiences. Learners sometimes reported several types of experience in one activity and initially one negative and nine positive preliminary categories of educational experience were produced.

(Table 37). These were later reduced to form categories which were exclusive to one activity; no teaching or learning, job teaching, and non-job teaching, and learning opportunity.

TABLE 37

Responses from Learners to the question "Were you told or did you see anything which you felt was important for your education?"

Wards	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton	All Wards
Speciality	Med	Med	Surg	Surg	Orth	Orth	
No. of activities	94	95	77	86	80	92	524
	%	%	%	%	%	%	%
Categories of teaching and learning							
No teaching or learning	29.8	58.9	28.6	36.0	47.5	44.6	41.2
1.Job teaching 'how'	22.3	24.2	22.1	23.3	15.0	26.1	22.3
2.Job teaching 'why'	14.9	11.6	15.6	18.6	6.3	13.1	13.4
3.Nursing theory (not job related)	27.7	14.7	23.4	23.3	12.5	21.8	20.8
4.Social background of patient	1.1.	1.1	10.4	2.3	5.0	0	3.1
5.Patient's reaction to illness, & feelings	7.4	0	15.6	2.3	5.0	2.2	5.2
6.Results of previous care	8.5	2.1	13.0	7.0	7.5	7.6	7.4
7.Signs and symptoms of disease	16.0	3.2	7.8	9.3	12.5	2.2	8.4
8.Nursing knowledge (no teacher)	2.2	2.1	1.3	0	0	0	1.0
9.Other -.e.g discussing assessments	5.3	0	7.8	1.2	0	2.2	2.9

N.B. More than one category emerged in some activities, therefore total more than 100%

In the situations in which learners neither saw nor heard anything which they felt to be important for their education (41.2 per cent of 524 activities) it was evident that they felt that nothing was transmitted to them which in any way contributed to their existing skills or state of knowledge;

either they saw or heard nothing, or what they experienced was not new to them. Typical responses were:

"I've seen it all before."

"I saw a type of drainage, but it wasn't important for my education at this stage."

"No, it was just another back round. We knew what we were going to find anyway."

Job teaching was defined as "the transmission of knowledge or skills related to a job currently being done, from someone identified as a teacher to a learner". Job teaching is, therefore, comparable in some ways to 'job instruction' defined by Bendall (1973 p. 37) "instruction as to some detail of the job currently being done" but it includes a 'covert' element. Job teaching did not necessarily involve any 'active' participation from the person identified as the teacher. Thus, in some situations, learners reported things which they had seen, or overheard even though there was no overt or active transmission of knowledge or overt demonstration. In other words, the teacher was a 'passive' participant of the interaction; the teaching was 'by example'. The distinction between 'active' and 'passive' teaching will be discussed later (pp 233 - 236)

Job teaching had two dimensions - job 'how' and job 'why'. Learners described what they had seen or heard, thus during some interactions the teaching they received was concerned only with the physical performance of a job but on other occasions they received knowledge to help them to understand why the job was done in a particular way. Typical examples of job 'how' teaching were:

"She corrected me when I did wrong - opening the dressing pack out".

"She was showing me how to put a drug into the I.V. drip." (Intravenous infusion).

"I was watching the technician take blood and saw how she held her arm straight."

The job 'why' teaching generally involved some kind of explanation;

"I was told about the pre-med., and what time it would take effect". (reference to an injection given prior to an operation.)

"She told us about the drugs from two syringes and about oxygen. I didn't quite understand; I was seeing something I hadn't seen before."

"You have to give it deeply because of the staining. I will be expected to give it when I am trained, therefore it's important for my education."

"I didn't know they had parotitis from dirty mouths."

During some activities learners were taught both 'how' and 'why' to do a job.

"How to lay the trolley and why different things were needed. The doctor told us that blood usually clots quickly."

"She told me why the patient was on Isogel and antiseptic for the bowel and went through the procedure as we were doing the drug round."

Job 'how' teaching appeared to be very similar on all wards, ranging from 26.1 per cent of activities which were sampled on Heaton ward, to 15.0 per cent on Naomi. (Table 37). On every ward there was more job 'how' teaching than job 'why' teaching, suggesting that the emphasis in training was placed on producing competent technicians who were capable of doing the work.

The teaching of nursing theory which was not related to the performance of a particular job,generally took place during the quieter afternoon periods, when it was the practice for learners to congregate for discussions, but nursing theory was also transmitted during doctors' rounds and less frequently during activities such as bed-making, when the conversation did not relate to the job currently being done. Responses from learners show how much of the theory was 'disease' centred.

"Yes, I was told about asthma and emphysema relating to the patient. I could see the X-rays."

"You learn a lot discussing like this. We were talking about diabetes and also about hepatitis. You bring up new points."

"I asked about congestive cardiac failure and she explained."

"I heard him explain about the abdominal pain being due to an infection in the uterus - to the patient."

"Yes, described the patient's lump so we could see it - also about D.V.T.". (Deep Vein Thrombosis).

There was transmission of nursing theory during 20.8 per cent of the 524 activities but there were marked differences between wards which may in part explain the previous high or low rating of wards by learners in Stage One. At first sight the teaching on the two surgical wards , Elizabeth and Charlotte, appears to be similar (Table 37, items 1, 2 and 3). However, it is shown later (pp.257-258) that the differences between the two wards lay not in the teaching but in the teachers. But on the medical and orthopaedic wards, there was more teaching of theory, both about the work that was being done and unrelated to the work, on the high rated ward in each pair (Neville and Heaton) compared to the low rated ward which could account for a previous high rating.

In 2.9 per cent of the activities nurses exchanged nursing knowledge which was not directly concerned with the patients. Invariably, this centred on the statutory assessments and examinations which caused some apprehension amongst future participants.

Learning opportunities were defined as "situations in which learners become aware through sight, hearing or other senses, of experiences which contribute to their education. They can be distinguished from teaching situations by the absence of an identifiable teacher." The learners' awareness is an essential element of a learning opportunity. Learners in this study were able to report seeing or hearing things which they felt were important

for their education whilst they were engaged in carrying out patient care. In 3.1 per cent of the activities learners found out details of the patient's social background.

"The patient told me about her social background. She has a baby four months old."

"The patient gave me her social background."

It was also evident that on some occasions learners became aware of patients' reaction to illness, and of their feelings, whilst talking to them as they carried out physical care.

"It's important for the patient's morale. The patient was upset. If someone is talking to you it cheers you up..... she talks about the baby now - it helps her. I would be upset in her place."

"She was in a lot of pain and it was painful to move. She had pain."

"I marvel at the way she accepts her illness."

"You have to readjust to the patient's moods. She's different every day."

"The patient swore and said we were hurting him."

However, this awareness of the patient as an individual with feelings varied between the wards. Although the overall percentage of this type of learning opportunity was low (5.2 per cent) there was a relatively high percentage (15.6 per cent) on Elizabeth ward (low rated surgical). (Table 37). Most of the learners on this ward, at some stage, demonstrated awareness of the patient's feelings and one explanation for the difference in the learners' perception appears to be that the sister on Elizabeth ward operated a system of 'total patient care', in which learners did all the care for a patient. Learners viewed the system favourably and felt that they knew more about their patients.

"We do 'total patient care' on this ward. I prefer it because you know exactly what each patient on your side has. You learn better and get to know the patient over longer periods of time. It's better than on other wards when you may be put down for the same thing all the time- it can get boring."

In 7.4 per cent of the 524 activities learners reported seeing the results of previous care. Typically this type of response was related to the healing of wounds.

"You can see how it heals over."

"The wound had changed drastically since yesterday - there was a small hole yesterday and to-day half the suture line was gaping."

"I noticed that the wound needed more packing - it had widened."

Learners also gave responses in 8.4 per cent of the activities indicating that they had had an opportunity to learn about the signs and symptoms of disease.

"I didn't see anything, but one patient had a very fast pulse - highest I had come across."

"The patient said she was losing weight. It's a thing you just hold in your mind and maybe relate to later."

"I saw he had difficulty in breathing and felt giddy."

(Apart from these learning opportunities, there were also occasions on which learners reported that they had observed signs and symptoms of disease but that what they had seen was not important for their education - usually because they had been observed on previous occasions. Since learners were usually adamant about the irrelevance of an activity, these were not categorised as learning opportunities.)

There was a minority of cases (1.0 per cent) in which learners had an opportunity to learn by reading case notes and books. Where no teacher could be identified, they satisfied the criteria for being classified as a learning opportunity.

"One patient had a mastectomy and I wasn't sure and looked it up in my book..... if I know what patients have had done, I can approach them and know what to say."

"The others are a bit more advanced than me - it's a bit above me. I was reading about diabetes. It helps to be able to read about patients in the ward."

However, there were almost as many responses to show that learners had some reservations about reading in full view of patients and in the company of others.

"I was reading about monitoring. I like to sit and read, but can't concentrate with others talking. On another ward, we had a little study room. It's difficult in an open ward. The grades are difficult." (Reference, no doubt, to learners different stages of training.)

"I didn't do any work because I couldn't concentrate. I can't work very well unless it's quiet."

"The books are not exactly interesting - a bit far above me. To be honest sometimes I don't study if I don't feel like it."

These nine categories of teaching and learning were useful for demonstrating the detailed nature of the learning experiences on the six wards. But in order to facilitate further analysis they were reduced to form categories which were exclusive to one activity: job teaching which included both 'how' and 'why' job teaching, 'non-job teaching' and 'learning opportunity'. Any teaching which occurred during an activity took priority over a learning opportunity, so the amalgamation of categories meant that some learning opportunities no longer appeared in the figures.

The teaching and learning identified in the sample of cases on the six wards is shown in Table 38. The reader is reminded that, because of the purposive sampling of teaching and potential teaching situations, the exclusion of lone nurse activities, and the fact that the observations took place under conditions which would probably favour an increase in teaching,

(namely when the ward sister was on duty and trained nurses were not on holiday) the percentages of teaching and learning activities almost certainly exceeds the maximum that would be found in a random sample in any ward. In other words, the reader should not assume that, for example, there would have been job-teaching in 20.0 per cent of all activities on Naomi ward. Nevertheless, it demonstrates the similarities and differences between the six wards, since activities were sampled under similar circumstances.

TABLE 38

Comparison of teaching and learning on six wards

	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton
Number of activities	94 %	95 %	77 %	86 %	80 %	92 %
Categories of teaching and learning.						
No teaching or learning opportunity	29.8	58.9	28.6	36.0	47.5	44.6
Job teaching	26.6	24.2	26.0	24.4	20.0	27.2
Non-job teaching	24.5	11.6	20.8	24.4	12.5	20.7
Learning opportunity	19.1	5.3	24.7	15.1	20.0	7.6

Non-job teaching was comparable with that defined by Bendall (1973 p.37 as "discussion of patient's diagnosis, treatment and needs outside the immediacy of the routine", with an additional proviso "or unrelated to the job currently being done." Some transmission of nursing theory which was not related to the performance of a job, did not appear in the non-job teaching percentages because job teaching occurring during the same activity took priority. This did not amount to more than 3.4 per cent for any ward.

The non-job teaching on Irena (low rated medical) and Naomi (low rated orthopaedic) wards was considerably less than that occurring on the other wards: job teaching was similar on all wards, but the percentage of learning opportunities on Irena and Heaton (high rated orthopaedic) wards were remarkably low (as they were in Table 37). On these two wards a rigid routine and system of task allocation appeared to inhibit the learners' powers of discovery and contribute to an automatic job performance.

Active and Passive Teaching

Close examination of comments learners made about the activities in which they were involved revealed two distinct types of teaching situation which will hereafter be referred to as 'active' and 'passive' teaching. The distinction concerned the behaviour of the teacher.

> Active teaching is defined as overt demonstration of a skill, or transmission of knowledge, from someone identifiable as a teacher to someone identifiable as a learner. The teacher specifies by word or deed that which is being transmitted.
>
> Passive teaching is the covert transmission of a skill or knowledge between two persons, one of whom is a learner who is aware that something is being transmitted, and the other a passive teacher, who does not specify that which is being transmitted. This type of teaching is wholly dependent on the learner being aware that there is something to be learnt from the passive teacher.

It is arguable whether passive teaching should be labelled a teach-situation, but insofar as a person is present to act as a 'model' or a source of knowledge, the interaction differs from a learning opportunity, in which no person can be identified as a teacher.

Both types of teaching were recognised during basic and technical activities - in the former there was 83.3 per cent active teaching and 16.7 per cent passive teaching (approximately 4:1), and in the latter there

was 90.1 per cent active teaching to 0.9 per cent passive teaching (approximately 9:1). Thus, in the two types of activities which formed the bulk of the work, only a small percentage was passive or 'by example'. In other words, the vast majority of teachers positively demonstrated the skill or transmitted the knowledge.

The following examples of active teaching during technical work illustrate the positive involvement of the teacher.

"She taught me a lot during the dressing - what to look for and why a haematoma had formed." (Second year pupil with senior sister).

"Staff nurse told me how to take out the redivac. She told me where I went wrong. I didn't know how to take it out before. I didn't do it very well." (Second year pupil with staff nurse).

"She told me what the drugs were for." (First year student with staff nurse.)

"Sister explained about strict asepsis and to tell the patient to stop breathing when you take the tubes out." (Second year student watching sister remove chest tubes)

"She told me there was a certain way to do it because the patient was thin. I've given intramuscular injections but not subcutaneous like this. It felt different because she was thin, if you understand me." (First year student giving injection with staff nurse).

"She told me what he had had and how to nurse him. She told me about the new roller and plaster." (Second year student assisting sister who was putting patient from theatre back to bed.)

In the majority of the active teaching interactions, there was verbal communication between teacher and learner, but when passive teaching took place verbal explanations were absent.

"I saw the technique of it - I haven't seen it often and now it's imprinted on my mind. I wasn't really told anything." (First year student assisting sister and staff nurse to give an olive oil enema).

"I just saw the actual technique." (First year student assisting student with aseptic dressing).

"She removed the sutures and gave a bladder washout. It was the second one I'd seen, so seeing another was important and hopefully I'll be able to do it next time. I wasn't told anything." (Second year student assisting first year pupil).

"I haven't seen that set. They were regulating it. It fills and empties like a paediatric drip - same principle." (Third year student watching staff nurse and Enrolled nurse.)

The above examples are typical of the passive teaching that occurred during technical work. The passive teacher did not make explicit either prior to or during the actual interaction that a skill was being demonstrated, but the learner was aware of being in a learning situation and prepared for discovery. Occasionally teaching was both 'active' and 'passive'.

"I heard how much sterile water was put in the baloon and watched the sterile techniques. The SEN told me the gel was lubricant and freezing." (Learner on first ward watching male catherization).

There was less teaching during the basic work but when active teaching took place the learner was able to describe the teacher's active involvement. The teaching did not always relate to the job being done.

"I was told to keep the legs straight while we lifted because it would dislocate." (Second year student putting patient back to bed with SEN).

"We were trying to get her out and she screamed. Sister came and said we needed three people." (First year student getting elderly patient out of bed with another student).

"I was told about the differences between osteo and rheumatoid arthritis. Sister asked me what the difference was and I didn't know, so she told me while we were doing the bed." (First year student making empty bed with sister).

"The auxiliary told me they had used a zimmer frame to take his weight when they got him out and it had helped." (Second year student assisting auxiliary to get patient out of bed).

"The student pointed out the healing of the wound - he's to have a dry dressing now." (Student on first ward bathing patient with second year student).

In active teaching the communication was directly between the teacher and the learner, but in passive teaching the communication was directed at a third person rather than the learner, so that the learner overheard or watched an interaction in which her learner role had not been made explicit by the passive teacher.

"She told the patient to take deep breaths and a few steps." (Second year pupil with junior sister, assisting patient from the toilet).

"Sister came and asked her to lift her leg and told her the use may not come back. I didn't realise that, so I did learn something." (Second year student washing patient with auxiliary).

"I was there when the houseman explained to Mrs.... what she had had done - it was interesting - and what to expect for her recovery." (Second year student with third year student bathing patient - a doctor arrived to talk to the patient.)

"The junior sister encouraged the patient to help herself a lot. This will help us all in the future - watching the junior sister was important." (Third year student with junior sister getting patient out of bed.)

Work, Teaching and Learning.

It was shown in Chapter 11 that the type of work which learners felt was important for their education and in which they needed practice, teaching or supervision, was more likely to be technical rather than basic. The purpose now is to ascertain the type of work activity during which teaching and learning occurred.

Although there were more basic than technical cases in the overall sample of learner activities (45.8 per cent basic and 35.3 per cent technical) two thirds of all the job teaching which came to light took place during technical activities. Separate analysis of 238 basic and 185 technical activities revealed that the percentage of job teaching during technical activities was three times the percentage in basic activities; 48.1 per cent in the technical and 16.4 per cent in the basic (Table 39). There were slightly more learning opportunities in basic activities; 18.5 per cent basic and 13.5 per cent technical. Non-job teaching occurring during basic and technical activities is partly due to the inclusion of doctors' rounds in this category, but in all cases the knowledge that was transmitted did not concern the 'how' or 'why' of job performance. There was no teaching or learning in 61.0 per cent of the basic activities compared to only 27.6 per cent of the technical activities.

TABLE 39.

Teaching and Learning during basic and technical activities (All wards).

	Number of activities	No teaching or learning	Job teaching	Non-job teaching	Learning opportun
		%	%	%	%
Basic activities	238	61.0	16.4	4.2	18.5
Technical activities	185	27.6	48.1	10.8	13.5

These data on teaching and learning show that learners involved in almost two thirds of the basic activities were fulfilling a 'worker' role, for no teaching or learning took place, and when doing the bulk of the basic work learners said that they felt fully competent and did not need further practice (see Chapter 11). Student and pupil nurses were more likely to be 'learners' when doing technical work for teaching or learning occurred in approximately two thirds of the activities of this nature, and it was in this type of work that they felt that they needed either teaching, supervision or practice.

It was evident from learners' responses and comments that teaching and learning was related to the frequency of job performance and that one of the main reasons for the absence of teaching and learning, particularly when doing basic work, was that it was a 'routine' or daily occurrence - many learners did not feel that they were doing anything important for their education and consequently their learning expectations were low.

> "She's been in a long time now. I do it every day. I wasn't told anything." (First year student helping sister to get patient out of bed.)

Analysis of 194 repetitive basic activities showed that there was no teaching or learning in two thirds of these activities. (Table 40). There was the lowest percentage of teaching (16.5 per cent) in basic activities which were done 'very often', and the highest percentage of teaching (80 per cent) in technical work which had been done 'not very often'.

TABLE 40

Teaching and Learning during basic and technical activities in relation to frequency of task performance

	Frequency of task performance	
	Very often.	Quite often/not very often
No. of activities	194	44
	%	%
Basic activities:		
Teaching	16.5	34.0
Learning opportunity	16.5	30.0
No teaching or learning	67.0	36.4

	Very often.	Quite often.	Not very often.
No. of activities	52	63	70
	%	%	%
Technical activities:			
Teaching	48.1	58.7	80.0
Learning opportunity	25.0	12.7	8.6
No teaching or learning	26.9	28.6	11.4

* There were only 7 basic activities which had been performed 'not very often' - therefore the two categories were combined.

The three most common reasons for work having been done infrequently appeared to be either that the learner was junior, new to the ward or that the task itself was infrequently done, and under these circumstances teaching took place (Only 7 of the infrequent activities were basic, compared to 70 technical).

The following incidents, concerning infrequent technical activities, are typical:

"I have to learn to get them ready for theatre as soon as possible - we're expected to do it on other wards. Sister said what she was doing as she did it - a lot is common sense, but it was helpful to have her say what she was doing." (First year student in first week on ward).

"I took stitches out. Just doing it was important. I haven't done it before. She told me as I went along - to cut the stitch so that the knot didn't go through." (First year pupil in first week, working with third year student).

"I think the students on here do it quite often, but it's only my second week. I've done dressings on other wards. This is an uncommon type of suture. Sister told me how it would have to be removed. Doing the dressing itself, she told me what to do." (Second year pupil).

"Staff nurse told us what to do if she arrested - we know what to do. I've only seen one arrest. It was helpful to go through what we would have to do." (Third year student in twelfth week on ward, watching monitor.)

Variations in teaching and learning cannot be wholly explained by the frequency of task performance, for teaching took place in almost half the repetitive technical activities, and there were learning opportunities in a quarter (Table 40).

The teaching which took place whilst learners were engaged in basic and technical activities appeared to be related both to the stage of training and the time spent on the ward, but there was consistently a higher percentage of teaching during technical activities (Tables 41 and 42 and Figures 4 and 5). This was so on every ward except for one instance when the sub-sample of

of activities was only three. On Irena ward, the percentage of teaching which took place during basic activities never exceeded 12.5 per cent, no matter how long the learner had been on the ward or her stage of training.

TABLE 41.

Teaching and Learning during basic and technical activities in relation to stage of training (All wards)

	First ward	Year 1	Year 2	Year 3
no. of activities	29	59	93	57
	%	%	%	%
Basic activities:				
Teaching	42.9	20.6	16.5	15.8
Learning opportunity	0	7.9	27.8	22.8
No teaching or learning	57.1	71.4	55.7	61.4
no. of activities	31	40	50	64
	%	%	%	%
Technical activities:				
Teaching	83.9	70.0	64.0	48.4
Learning opportunity	6.5	12.5	14.0	17.2
No teaching or learning	9.7	17.5	22.0	34.4

The learners' expectations of teaching were modest for having been shown how to do a task they did not expect much more instruction.

"I wasn't told anything because I was told last time...
I've seen it once and done it once so I feel competent."
(Student in fourth week on first ward, shaving patient.)

The third year students had low expectations of being taught and received less teaching during basic and technical activities than any other group.

"It's experience that counts. Training is necessary, it's up to you what you do with it. It's up to us what you learn. At my stage, you don't always need someone standing over you saying 'look at this and what about that'. (Third year student in first

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	%	%	%	%
Basic activities:				
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Learning opportunity	0	7.9	27.8	22.8
No teaching or learning	57.1	71.4	55.7	61.4
no. of activities	31	40	50	64
	%	%	%	%
Technical activities:				
Teaching	83.9	70.0	64.0	48.4
Learning opportunity	6.5	12.5	14.0	17.2
No teaching or learning	9.7	17.5	22.0	34.4

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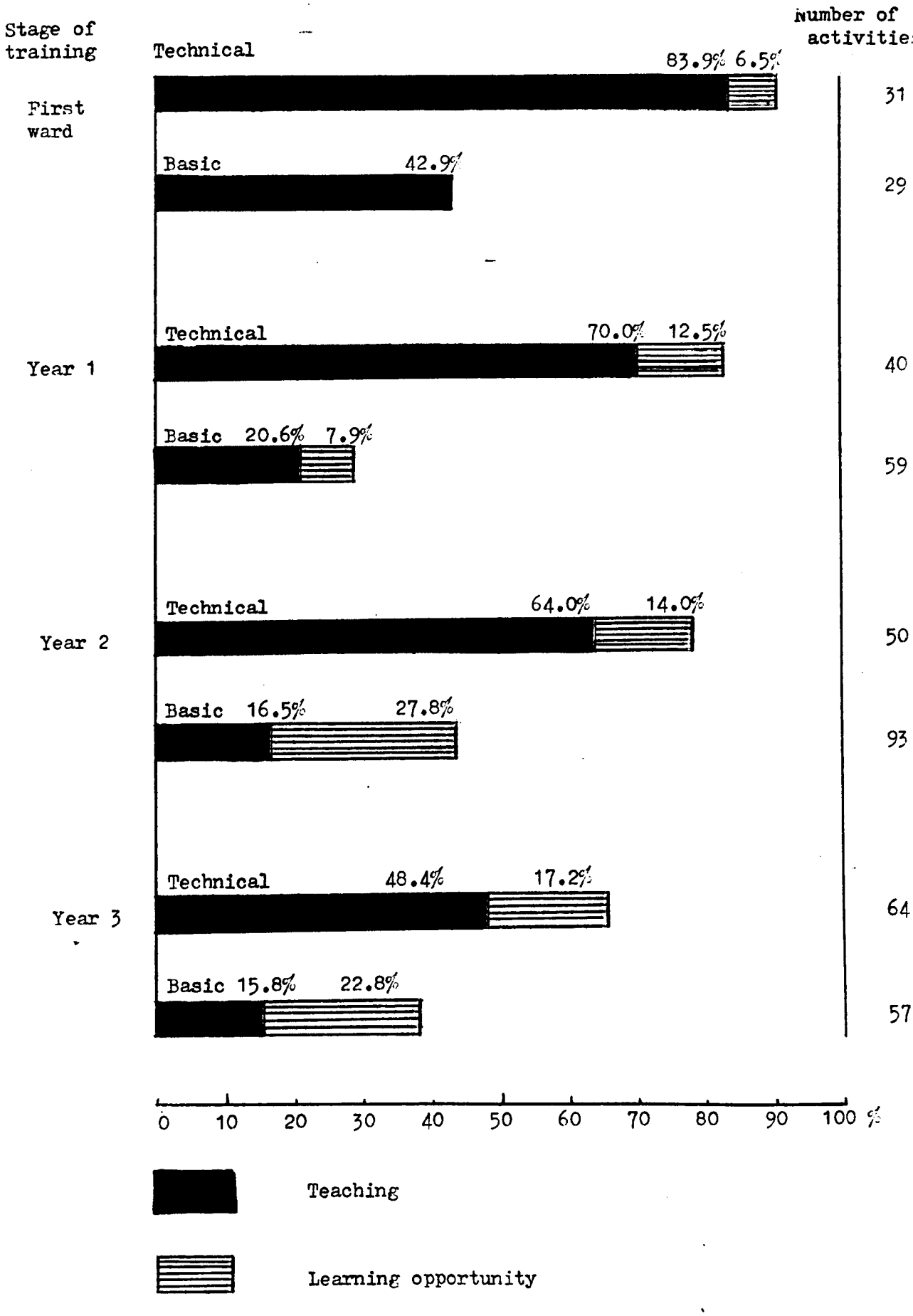
"It's experience that counts. Training is necessary, it's up to you what you do with it. It's up to us what you learn. At my stage, you don't always need someone standing over you saying 'look at this and what about that'. (Third year student in first week, getting patient back to bed).

Figure 4 Teaching and learning during basic and technical activities in relation to stage of training.



Supervision and teaching was almost universally welcomed by the students and pupils, and although a minority indicated that teaching which they had received had been superfluous because they 'already knew' there was no suggestion that supervision had caused 'tension'.

Learners on their first ward were taught in 42.9 per cent of the basic activities and thereafter, depending on the ward, teaching in this type of activity fell to 20.6 per cent and below (Table 41 and Figure 4). Teaching during technical activities ranged from 83.9 per cent for learners on their first ward down to 48.4 per cent for third year students. Even though second and third year learners received little teaching whilst doing basic work they still took the opportunity to learn about the patients in about a quarter of the activities. Charlotte ward was exceptional since either teaching or learning was reported in three quarters of the basic activities in which second and third year learners were involved. Third year learners on the two surgical wards (Charlotte and Elizabeth) reported learning opportunities in a third of the technical activities, so even though they were taught less because many of the activities had been done frequently due to the nature of the work in surgical wards, the constant changes in patients and wounds appeared to create more learning opportunities. Second and third year learners on Irena received the least teaching of all the groups whilst doing both basic and technical work and they were aware of few learning opportunities.

Both the teaching and learning opportunities which occurred during basic activities decreased the longer the learner stayed in the ward (Table 42 and Figure 5). This was so on nearly every ward.

Analysis of the sample of basic activities from all the wards shows that the percentage of teaching decreased from 26 per cent when learners were in their first two weeks to 14.6 per cent when they had been in the ward for over seven weeks. The percentage of learning opportunities also decreased from 32 per cent to 13.5 per cent, but the teaching and learning that occurred during technical activities did not vary much, and there was

TABLE 42

Teaching and Learning during basic and technical activities in relation to time spent on ward.

	Weeks 1 and 2	Weeks 3,4,5,6,	Over 7 weeks
No. of activities	50	99	89
	%	%	%
Basic activities:			
Teaching	26.0	21.2	14.6
Learning opportunity	32.0	17.2	13.5
No teaching or learning	42.0	61.6	71.9
No. of activities	40	81	64
	%	%	%
Technical activities:			
Teaching	65.0	65.4	59.4
Learning opportunity	10.0	17.3	10.9
No teaching or learning	25.0	17.3	29.7

only a slight fall to 59.4 per cent in respect of activities in which the participants were learners with over seven weeks experience on the ward.

These data show how the teaching and learning in the wards varied not only with the nature of the activity but also with the learner. Thus a junior nurse entering a new ward was likely to be taught in a very high percentage of the technical activities in which she participated. In contrast, a third year student with over seven weeks experience was likely to be involved in a low percentage of teaching/learning situations whilst doing repetitive basic work. But the teaching also varied with the work companion.

Figure 5 Teaching and learning during basic and technical activities in relation to time spent on ward.

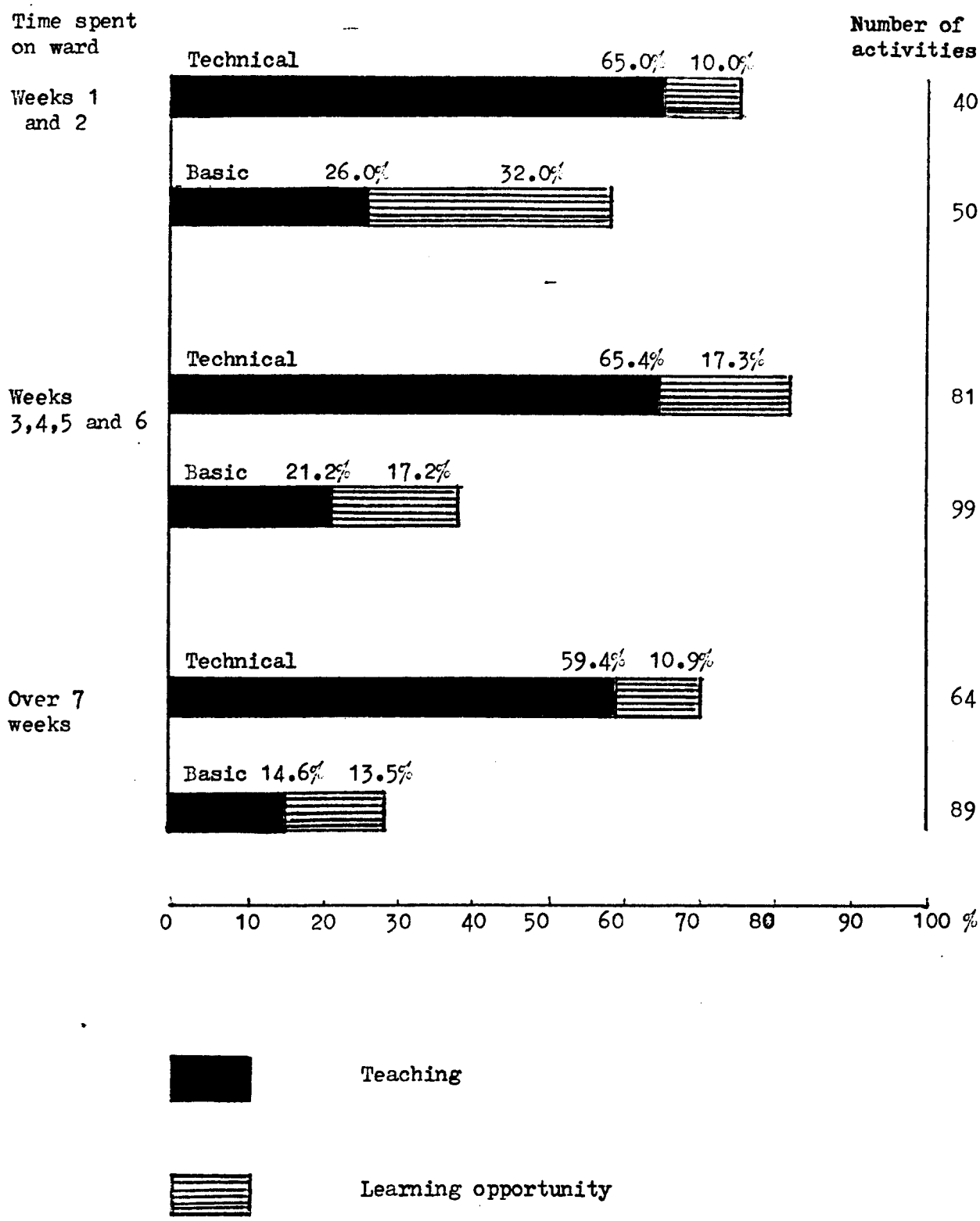


TABLE 43.

Comparison of the teaching and learning during basic and technical activities when learners were with trained and untrained work companions (All wards).

Type of activity.	Number of cases.	No teaching or learning.	Job teaching.	Non-job teaching.	Learning opportunity.
		%	%	%	%
Learner with trained staff:					
Basic	92	56.6	23.9	5.4	14.1
Technical	128	28.1	51.6	13.3	7.0
Learner with untrained staff:					
Basic	146	63.7	11.6	3.4	21.2
Technical	57	30.0	40.4	5.3	24.6

There was some support for Hypothesis 2 "Trained nurses teach during specialist activities". In the first place, trained staff were involved in more technical than basic activities - this was confirmed in the ten minute activity sampling, and reflected in the size of the sub-samples of basic and technical activities. When a learner was with a trained member of staff the sample sizes were Basic 92 and Technical 128, but the corresponding numbers when a learner was with an untrained person were 146 Basic and 57 Technical. (Table 43). Secondly, there was a higher percentage of teaching during technical activities, as trained staff not only taught more during technical activities but were more frequently involved in them.

There was a higher percentage of teaching during both basic and technical activities when the learner was with a trained person; job teaching taking place in over half the technical activities (51.6 per cent) and in approximately a quarter of the basic activities (23.9). The lowest

percentage of job teaching (11.6 per cent) occurred when learners were doing basic work with the untrained. (Table 43). This was so on nearly eve ward. Exceptionally, there was a higher percentage of teaching during technical activities when learners on Irena were with the untrained (70.6 per cent - 17 activities) than with the trained (43.8 per cent - 16 activities and the percentage of teaching during basic activities on this ward was very low regardless of work companion. There was a marginally higher percentage of teaching during basic activities when learners on Heaton were with the untrained.

Overt and Covert Teaching

Although there was more teaching when the learner was with a trained person, it did not necessarily follow that teaching would always take place whenever the work companion was trained, for in some cases the learner was perceived only as a worker. This is best illustrated by two separate incidents recorded on a medical ward.

On two occasions, thirteen days apart, learners were observed in a 'potential teaching situation' for in each case they were assisting the sister with a drug round. However, observations suggested, and subsequent interviews confirmed, that in each instance, the learner had fulfilled a worker role by being the transporter of medicine from trolley to patient.

Questioned about the first incident, the second year student in her second week on the ward, felt that she needed further practice in giving out drugs, but no teaching or learning was noted, and she was not told anything.

> "I wasn't doing something I didn't already know. I didn't learn anything I didn't know. I just gave out medicines."

In the second incident, the student in the fifth week of her first ward felt that she was doing something important for her education, but remarked

"We were in a rush, so I wasn't told anything to-day..... I watch what is given, but they do it so quickly and I get left behind. The amount is difficult to get used to."

However, on another medical ward, the learners were perceived as learners whilst doing this technical work. The staff nurse turned the drug round into a teaching situation.

"Staff nurse asked me about drugs and I asked. I can always ask if I want to know. I was told about the side effects." (First year student in tenth week on ward).

The sample of 'potential teaching 'by example' situations (i.e. learner in work situation with trained person) on each ward were analysed. When the sample included the overt teaching situations, it was found that teaching had occurred during 52 - 65 per cent of all the occasions that learners worked with a trained person, on all wards except Irena, where the figure was 32.4 per cent. When all the overt teaching situations were excluded -(these ranged from 5 on Irena to 15 on Charlotte), analysis revealed that teaching had occurred on 35 - 55 per cent of the occasions that learners were working with a trained person on all wards except Irena, when teaching occurred on only 20.7 per cent of the occasions. (Table 44). Thus, even though teaching had not been observed it had occurred in between a fifth and a half of the activities, indicating that work studies which record only overt teaching may not be wholly reliable.

Analysis of 419 activities of all types (basic, technical, informational and relational) in which a learner nurse was working with, or in the presence of, another member of staff, and in which no overt teaching was recorded, showed that teaching had, in fact, taken place in 30.6 per cent of these cases. There had also been opportunities to learn in a further 17.7 per cent (Table 45). In the 47 activities in which the learner was alone, learning opportunities had presented themselves in 46.8 per cent of the activities.

TABLE 44

Teaching and learning reported by learners during learner/trained work activities in which no overt teaching had been observed, on six wards.

Ward	Speciality	No. of activities	Teaching reported by learners	Learning opportunity
			%	%
Neville	M. Med	25	44.0	24.0
Irena	F. Med	29	20.7	0
Elizabeth	F. Surg/Gynae	22	54.6	13.6
Charlotte	F. Surg	35	34.3	17.1
Naomi	F. Ortho	26	34.6	19.2
Heaton	M. Ortho	26	42.3	3.8

TABLE 45

Teaching and learning during activities in which no overt teaching had been recorded by the observer

	Number of activities.	No teaching or learning.	Job teaching.	Non-job teaching.	Learning opportunity.
		%	%	%	%
Learner with staff member	419	51.8	11.5	19.1	17.7
Lone learners	47	48.9	2.1	2.1	46.8

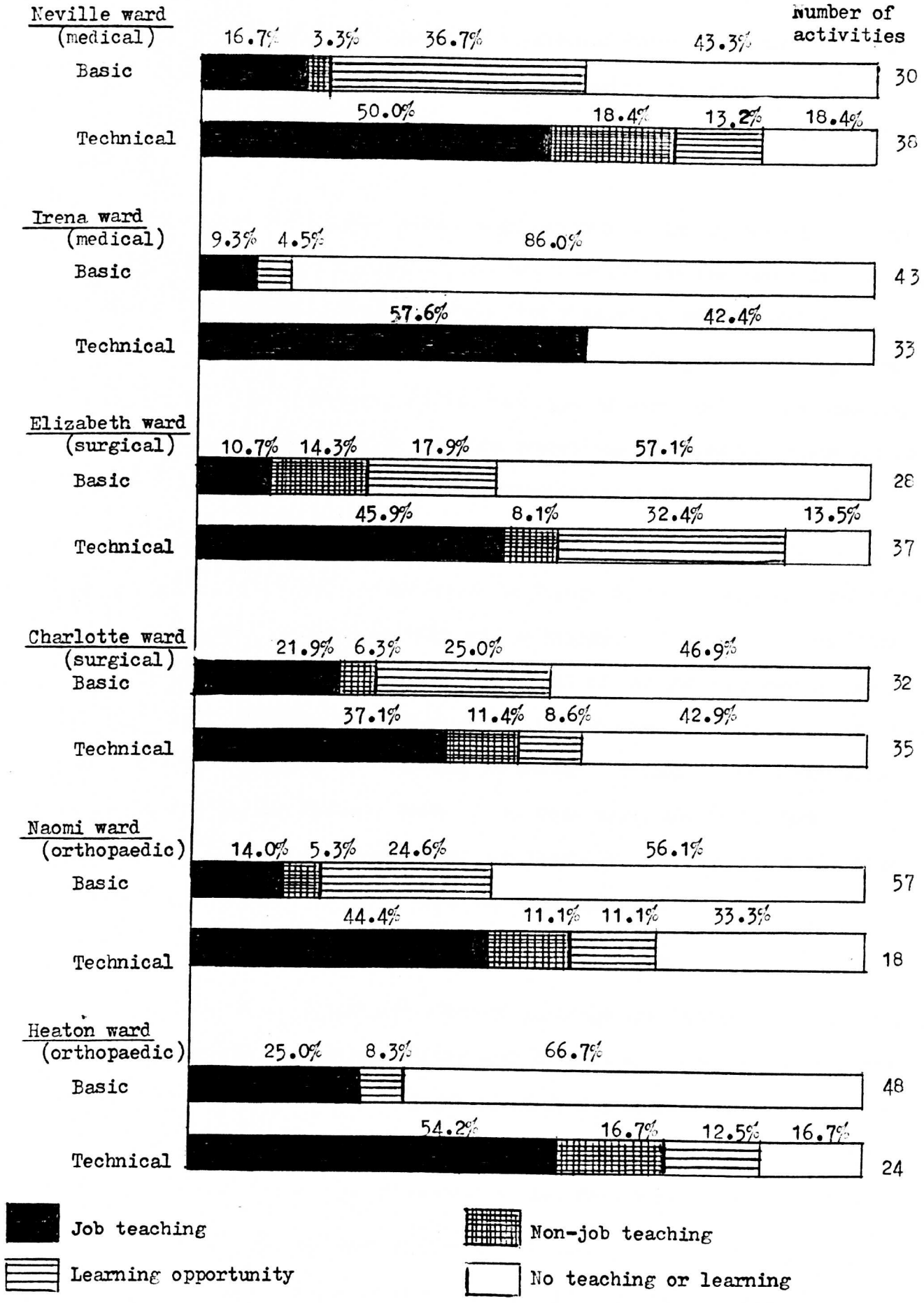
These figures would appear to support the assumption that student and pupil nurses learn whilst they are in the wards, even though the teaching is not overt, but as far as the work is concerned one must add the caveat 'during technical activities'. It was apparent to an independent observer that there was more teaching during technical work and the sample of overt teaching activities contained four times more technical than basic activities (48:13). Analysis of basic and technical activities in which there was no overt teaching also confirmed that there was considerably more teaching during

technical work. There was covert teaching in 44.5 per cent of the 137 technical activities compared to only 16 per cent of the 225 basic activities. However, learning opportunities were similar - 19.6 per cent basic and 16.8 per cent technical. These data highlight the need for a more effective method of measuring ward/teaching and learning, which also takes account of the covert teaching.

There was more teaching and learning during technical work on every ward although the differences were less marked on Charlotte ward (high rated surgica (Figure 6). Comparing the two medical wards, there was a higher percentage of teaching and learning in both types of activity on high rated Neville. On Irena, priority was given to technical work and the percentages of job teaching during technical and basic work were the highest and lowest respectively of all the wards. It was clear that when doing basic work on this ward, learners were perceived and perceived themselves, purely as workers, and there was little teaching or learning, whether learners were with the trained or the untrained. Irena ward was the only ward in which the percentage of teaching activities during technical work was higher when learners were with the untrained rather than the trained. Very few learning opportunities were recorded on this ward, and learners appeared to do the work, unaware that there was anything else to be learnt other than the physical performance of the job they were doing. The patient was rarely mentioned, as was the case on Neville.

In many respects the teaching and learning on the two surgical wards appear to be similar, and it is not until attention is paid to the work companion that the differences can be determined. On both wards there was less teaching when learners were with the untrained, but there was a higher percentage of learning opportunities due in part to the nature of the work. However, when learners on high rated Charlotte worked with a trained person during basic activities job teaching was relatively high and occurred on a

Figure 6 Teaching and learning during basic and technical activities on six wards



third of these occasions, compared to a fifth of those on Elizabeth. The trained staff on Elizabeth gave priority to teaching technical work and it took place in 60 per cent of these activities compared to 41.9 per cent on Charlotte.

On the two orthopaedic wards, when learners worked with trained nurses, there was teaching in a quarter of the basic activities and two thirds of the technical activities. There was very little teaching when learners on Naomi (low rated ward) did basic work together, but they took the opportunity to learn about their patients during this type of work, unlike the learners on Heaton who, irrespective of the work companion, appeared to notice little about their patients that they felt contributed to their education.

However, the differences in the teaching and learning, during basic and technical activities, demonstrated in Figure 6, do not appear sufficiently marked to explain the previous high or low rating. Only two features link the three high rated wards - higher percentage of job teaching during basic activities and a higher percentage of non-job teaching in technical activities, which is attributable to the teaching on doctors' rounds. But there were important differences between wards of the same type, and these were concerned more with the teachers than the teaching, and with the activities in which learners were involved when the work was done.

Ward Teachers and Teaching Initiators

Data from both sisters and learners in Stage One tended to suggest that there is a variety of teachers in the ward situation. Analysis of the 524 activities which were probed in depth identified a teacher in 43.7 per cent of the cases, and supported this finding. No dominant group assumed the role of teacher and the type of teacher varied from ward to ward.

The teacher was the person from whom knowledge and skills emanated (the method of interviewing learners was not appropriate for detecting transfer of attitudes). It was also possible in most cases to identify

the'teaching initiator', who by a request, question or directive, initiated the teaching or the situation in which teaching subsequently occurred. The teacher and teaching initiator were not necessarily the same person. For instance, a third year student was identified as the teacher in one interaction, since she was explaining to two junior students how to set up a trolley for a technical procedure. But the senior student indicated that the sister had initiated the session "Sister asked me to do it. She mentioned earlier, if I did it, to show them." In another formal group teaching situation, a doctor lecturing nurses was identified as the teacher, but the clinical teacher had initiated the session by enlisting the services of the doctor and ensuring that learners were released from the ward.

During the 238 basic nursing activities there was a variety of teachers to do the teaching as the need arose. What little teaching emerged was almost equally divided between senior sisters (5.9 per cent), other trained nurses such as junior sister, staff nurses and Enrolled nurses (5.9 per cent) and the untrained, of whom the majority were learners (6.7 per cent.) Teaching during technical activities was similarly divided between various staff members - senior sisters (16.2 per cent), other trained nurses (15.1 per cent), learners (13.5 per cent), clinical teachers (3.2 per cent) and doctors and consultants (7.0 per cent).

All grades of staff, irrespective of status, were found in more teaching situations in technical rather than basic activities - for trained nurses on the wards the ratio was 2 technical to 1 basic and for the untrained the ratio was 3 technical to 2 basic. Medical staff and the clinical teacher taught during predominantly technical activities.

Analysis of the informational and relational activities, which were mainly sampled when the work was done, identified the learners as the teacher in over a third of the activities (senior sister 12.1 per cent; other trained nurses 15.2 per cent; learners 33.3 per cent; clinical teachers 2 per cent; consultants and doctors 6.1 per cent). But there were variations between wards.

The samples of learner activities on the six wards reflected the association patterns on the wards, but was slightly biased towards work activities involving learners and trained members of staff (see Appendices 12 and 19). The purposive sampling of overt teaching and potential teaching situations, and random sampling of other types of activities, meant that any staff members who were teaching would emerge in the sample of activities.

A straight forward comparison of the samples of learner activities on the six wards highlighted the similarities and differences and revealed a variety of teachers, but provided no reason for the previous high or low rating of the wards. Despite the fact that observations were confined to times when the sister was on duty only the sisters on Charlotte (high rated surgical) and Naomi (low rated orthopaedic) appeared to figure prominently as teachers. On Charlotte and Neville (high rated medical) and Elizabeth (low rated surgical) there was a higher percentage of trained teachers of all types, but on Heaton (high rated orthopaedic) and Irena (low rated medical) the learners were found to be the teachers in more situations than the trained nurses. (Table 46).

The sister on Charlotte ward, which had been exceptionally high rated in Stage One, initiated over half the teaching incidents which were discovered on that ward (Table 46). She was the only sister observed participating in all types of teaching situations including formal teaching sessions. On all the other wards, except Naomi on which there was a much lower percentage of teaching activities, the learners initiated more teaching than the sister and her trained subordinates.

The teachers on the six wards, emerged from those with whom the learners worked or associated; therefore in order to find out the approximate amount of time learners spent in teaching situations with various groups, the learner/trained and learner/untrained activities were analysed separately to ascertain the percentage of cases in which teaching occurred. Over 64

TABLE 46

Teachers and teaching initiators on six wards

Ward Teachers

Wards.	No. acts.	No teaching.	Sister	SRN/SEN	Learners/ untrained.	Clinical teacher.	Doctor	Con-sultant.	Pat-ient
		%	%	%	%	%	%	%	%
Neville (M.Med)	94	47.9	3.2	17.0	17.0	2.1	6.4	6.4	
Irena (F.Med)	95	64.2	5.3	5.3	22.1	0	2.1	1.1	
Elizabeth (F. Surg)	77	51.9	9.1	9.1	15.6	7.8	5.2	0	1.3
Charlotte (F.Surg)	86	51.2	19.8	19.8	3.6	0	1.2	4.7	
Naomi (F.Ortho)	80	72.5	17.5	6.3	3.8	0	0	0	
Heaton (M.Ortho)	92	56.5	10.9	7.6	21.8	0	0	2.2	
All wards	524	57.4	10.7	10.9	14.7	1.5	2.5	1.9	0.4

Teaching Initiators

Wards	No. acts.	No teaching.	Sister	SRN/SEN	Learners/ untrained.	Clinical teacher/ school	Doctor	Con-sultant.	Pat-ient.
		%	%	%	%	%	%	%	%
Neville	94	47.9	4.3	11.7	27.7	6.4	0	2.1	0
Irena	95	64.2	10.5	4.2	17.9	3.3	0	0	0
Elizabeth	77	51.9	5.2	3.9	22.1	9.1	5.2	0	2.6
Charlotte	86	51.2	25.6	11.6	4.7	0	1.2	4.7	1.2
Naomi	80	72.5	12.5	6.3	8.6	0	0	0	0
Heaton	92	56.5	13.0	5.4	21.7	2.2	0	0	1.1
All wards	524	57.4	11.5	7.3	17.5	3.7	0.8	1.1	0.8

per cent of the learner/trained staff activities observed and recorded at 10 minute intervals on each ward, was sampled (i.e. one learner involved in the

activity was interviewed to ascertain what had occurred). Analysis of the sub-sample of these activities showed that teaching had occurred on over half the occasions that trained nursing or medical staff were with the learners, on all wards except Irena. On Irena (low rated medical ward) teaching occurred on a third of the occasions learners and trained staff were together (Table 47).

TABLE 47

Analysis of the sub-sample of learner/trained staff activities to show the percentage of teaching situations on six wards.

Ward	Speciality.	Rating.	No. of learner/ trained staff activities in sub-sample.	Percentage of teaching situations.
Neville	M. Medical	High	52	65.4
Irena	F. Medical	Low	39	33.3
Elizabeth	F. Surg/gynae	Low	41	61.0
Charlotte	F. Surg.	High	64	57.9
Naomi	F.Ortho.	Low	40	56.4
Heaton	M. Ortho.	High	34	52.9

The time that learners spent in teaching situations with the trained staff would depend on the amount of time they spent with them, as the following example will demonstrate.

Learners with trained staff 20 per cent of time.

Teaching occurs on 50 per cent of these occasions.

$$\text{i.e.} \quad \frac{50}{100} \times 20 = 10 \text{ per cent}$$

Therefore learners in teaching situation with trained staff 10 per cent of time.

It is, therefore, possible to calculate the approximate amount of time that learners on each ward spent in teaching situations with trained nursing or medical staff (Table 48). It is suggested that these figures are more reliable than those obtained by work studies for they take account of covert as well as overt teaching

TABLE 48.

Estimate of time spent by learners on six wards in teaching situations with trained nursing and medical staff.

Ward	Speciality	Time spent by learners with trained staff*		Percentage of teaching situations in sub-sample.	Estimated time in teaching situations.
		N	%	%	%
Neville	M.Med.	498	31.7	65.4	20.7
Irena	F. Med.	565	16.5	33.3	5.5
Elizabeth	F.Surg/gynae	564	17.2	61.0	10.5
Charlotte	F. Surg.	449	31.0	57.9	18.0
Naomi	F. Ortho.	513	15.2	56.4	8.6
Heaton	M. Ortho	367	13.1	52.9	6.9

* 10 minute activity sampling.

The time learners spent in teaching situations with the trained staff varied between wards. Comparing the two medical wards, learners on high rated Neville spent twice as much time with the trained staff and were twice as likely to be taught by them. Thus, it is estimated that learners on Neville spent 20.7 per cent of their time in teaching situations with trained nurses or doctors compared to only 5.5 per cent on Irena. Neither sister was heavily engaged in teaching but whilst other trained nurses on Neville undertook a teaching role this did not occur on Irena to any great extent. During the 'slack' period in the afternoons the trained nurses on Neville joined in the discussions with the learners, but on Irena the senior students led the discussions and the trained nurses rarely participated.

On the two surgical wards, there was teaching during approximately 60 per cent of the occasions when learners were with the trained staff, but learners on Charlotte spent nearly twice as much time with the trained nurses and doctors. They spent an estimated 18.0 per cent of their time in teaching activities with the trained staff compared to 10.5 per cent on Elizabeth.

Furthermore, it was the sister and the permanent trained nurses on Charlotte who did the teaching, whilst on Elizabeth ward it was often the temporary trained nurses from the central 'pool' or the clinical teacher. In the afternoons on Charlotte, learners were regularly joined by members of the trained staff who taught them, but on Elizabeth when there was an opportunity for learners to study (which was less frequent because of a heavy workload) they were not joined by the permanent trained nurses. The permanent trained nurses spent only 23.3 per cent of their time with learners compared to the temporary nurses' 44.4 per cent.

It is estimated that the learners on the high rated medical and surgical wards (Neville and Charlotte) spent more time in teaching situations with the trained staff, and it is suggested that this factor alone is sufficient to justify the former high rating of the wards. But the figures for the two orthopaedic wards are similar, and therefore puzzling. Learners on high rated Heaton spent an estimated 6.9 per cent of their time in teaching situations with the trained staff - the second lowest figure which is inconsistent with the previous high rating. In the afternoons, when the work was done and learners had an opportunity to study, the sister spent no time at all with the learners, and the trained nurses only 11.3 per cent - the lowest of all the wards.

But on the adjoining female orthopaedic ward, Naomi, the afternoon workload was the highest of all the wards, and learners continued to work into the afternoon. No formal teaching sessions or discussions were observed on this ward, and on the one quiet afternoon, learners were asked to clean out cupboards. The trained nurses spent the most time with learners in the afternoons but the ratio of trained to learner nurses was the least favourable ofall the wards, so although the sister and trained nurses spent a high percentage of their time with learners (in relation to the other wards), learners did not spend an exceptionally high percentage of their time with the trained. Circumstances which fell largely outside the control of the ward sister (viz. workload and low ratio of trained to

learner nurses) meant that learners on Naomi had less opportunity of being taught by trained nurses than their colleagues on Heaton.

Using similar calculations estimates of the time learners spent in teaching situations with untrained staff, who were mainly student and pupil nurses but occasionally auxiliaries, were obtained (Table 49). Teaching occurred during this type of activity on between a half and a quarter of the occasions learners were with the untrained, on all wards except Naomi. On this ward teaching was reported in only 7.5 per cent of cases - considerably less than the 56.4 per cent reported when they were with trained staff.

TABLE 49.

Estimate of time spent by learners on six wards in teaching situations with untrained staff (.e.g. learners, auxiliaries.)

Ward	No. of activities in sub-sample learner/untrained.	Percentage of teaching situations in sub-sample.xx	Time spent by learners with untrained*		Estimated time in teaching situations.
		%	N	%	%
Neville	42	33.4	498	34.7	11.6
Irena	56	41.1	565	46.5	19.1
Elizabeth	36	32.3	564	31.9	10.3
Charlotte	22	26.4	449	21.6	5.7
Naomi	40	7.5	513	40.0	3.0
Heaton	58	44.8	367	66.8	30.0

* 10 minute activity sampling. No trained person present.

xx Sub-sample of learner activities probed in depth.

On all wards except Irena, learners were more likely to be taught when they were with the trained than with the untrained. When percentages of estimated time spent in teaching situations with other untrained staff are compared, there are marked differences between wards - the percentages ranging from a very low 3.0 per cent on Naomi to an exceptionally high 30.0 per cent on Heaton.

TABLE 50

Comparison of estimated time learners on six wards spent in teaching situations with trained and untrained staff.

Ward	Speciality	Teaching situations with trained staff. (see table 48). %	Teaching situations with untrained staff. (see table 49). %	Total teaching situations with all staff members. %
Neville	M.Medical	20.7	11.6	32.3
Irena	F.Medical	5.5	19.1	24.6
Elizabeth	F.Surgical	10.5	10.3	20.8
Charlotte	F.Surgical	18.0	5.7	23.7
Naomi	F.Orthopaedic	8.6	3.0	11.6
Heaton	M.Orthopaedic	6.9	30.0	36.9

Estimates of the total time that learners spent in situations in which teaching was given by all types of teachers, would appear to justify the ratings which were given to wards by learners in the first stage of the research. A crucial difference between the high and low rated wards was that learners on the high rated ward in each pair spent more time in teaching situations than learners on the low rated wards. Even though much of the teaching on Heaton was done by the learners themselves, they spent three times more time in teaching situations than their peers on Naomi. But learners on the high rated medical and surgical wards (Neville and Charlotte) were also involved in more teaching activities with the trained and fewer with the untrained, than those on the low rated wards (Irena and Elizabeth). (Table 50).

Clinical Teacher

In the study as a whole, the clinical teacher did not emerge as a key teacher in the ward situation. Only one clinical teacher, who visited three of the wards, was encountered, and no clinical teacher visited the

other three wards - including Charlotte ward, which was eventually identified as an 'ideal' ward for teaching and learning. During observations on Neville and Irena wards, ward staff expressed regret that scheduled weekly visits by the clinical teacher had had to be cancelled because of other demands on the clinical teacher's time.

The clinical teacher was frequently involved in conducting statutory ward assessments and this encroached on teaching time, but she was also observed on an unscheduled visit to one ward showing a new non-teaching member of staff around the hospital, suggesting that administrative staff gave such duties priority over ward teaching.

One clinical teacher, whose services were shared between four wards, was unable to make much impact on the overall ward teaching, but on Elizabeth, the low rated surgical ward, the clinical teacher appeared to do more teaching in one day than the other trained nurses on the ward did in five days, and she also initiated more teaching. But paradoxically, on the one ward where the excessive workload probably made her presence necessary, planned teaching situations and ward assessments were observed being cancelled because of the work load.

Consultants and Doctors.

Members of the medical staff visited wards intermittently, and were identified as the teacher in a small minority of the cases. They initiated slightly less teaching than they actually did, and it was often left to others to engage their services. Learners were able to initiate teaching by asking them questions. A student on her first ward, watched a houseman examine a patient, and when she had finished approached her to ask a question. She later explained

"Doctor was examining the patient and I didn't know why she did something. She's young and friendly and yesterday she did bone marrow and I helped her, and she was very nice and not abrupt because I was new. Doctor asked the patient to put his hands out in front of him. I asked her why. It's to see if he has high carbon dioxide because he's twitchy."

As in this case, students and pupils felt able to question junior doctors. Assisting doctors diminished the social distance between learner and doctor, but they would not question consultants who were felt to be more remote and unapproachable.

Doctors' rounds afforded an opportunity for consultants to teach and impart information. On all the wards on which learners went on the rounds, the learners were generally able to relay something which had been seen or heard which they felt was important for their education.

"Going over patients' conditions, doctors discuss things that we don't usually hear of." (Third year student).

"Listening in as you go around - all of it you're learning." (First year student).

Thus the rounds gave learners access to privileged knowledge and information possessed by doctors; but sometimes they were not able to hear what was being said.

"You can't hear what Dr..... says. He doesn't address himself to us or sister - it's all a secret." (Second year student).

Whether or not learners accompanied consultants on the round depended on the consultant and the sister. Some consultants actively encouraged the learners to go on the round and taught them; others made no objection if the learners joined in but did not involve them in the proceedings, and others expressed a wish that the learners should not go. But observations in the

medical and orthopaedic wards showed that the sister also had some control over who went on the rounds. One of the medical consultants actively discouraged learners from going on his round, and the other, believing that rounds were of limited value for learners, gave ward lectures instead. However, the students and pupils on high rated Neville did go on his rounds explaining, "Sister told us to go..... Dr.... doesn't mind if there are not too many" or "If we're not busy, we can join in. I just joined in."

But on Irena ward, the sister excluded learners from the same consultant's round and the students and pupils continued with the work. "We keep out of the way," said a first year student, and a third year student who had been on the ward for 10 weeks confirmed her worker role.

> "I've never been invited on any of them. We're expected to get on with the work. We may sometimes be able to stand within earshot..... I haven't been to the consultant's ward lectures. Going on the rounds would be most helpful."

On Naomi, the low rated orthopaedic ward, only the sister accompanied the consultants and doctors on their rounds, whilst the learners continued with the work. Meanwhile, on the adjacent Heaton ward, the work time-table was pushed forward so that all members of the nursing staff, including the auxiliaries, could attend: but apart from the sister, the nurses were not actively involved. But the rounds removed uncertainty, for learners were able to overhear knowledge and information which was exchanged between doctors, consultants and the sister.

> "Patients are to move about and do exercises. They (consultants) have never talked to me. But it's very important to know what is going on." (Second year student).

In contrast to all the other consultants observed in the second stage of the study, the consultant on Charlotte actively taught the learners and regularly included them in his conversations. A trained nurse confirmed

his active teaching role, saying, "Mr.... always teaches on his round - but all the nurses try to hide behind each other because he pulls one out to ask questions." Observation of the round and interviews with learners verified this.

> "The consultant was telling me about varicose veins and asked me about CSOM. Mr... always asks learners." (Second year pupil in first week). (CSOM - chronic serous otitis media).
>
> "We do go on the rounds, but Mr.... is the only one who really teaches. The patient came in two weeks ago for a biopsy. He was saying about microscopic examination. He's a little high powered, but it is very important. It helps with exams and things. With the other patient he showed the lump when she lifted her arm." (Third year student).

Thus the consultant on Charlotte undertook an active teaching role, and his teaching became the focal point for further teaching initiated by the sister and carried out by trained and learner members of the ward staff. "You were all on the round", she exclained, "What must we specially note about Mrs...? What about nursing care? Have you elevated the foot of the bed?.... Go to lunch and think about it." Later in the day, a first and third year learner were observed explaining the care of a patient with breast cancer to a group of learners and trained nurses, and this was followed by a discussion led by the junior sister about the psychological care and needs of the patient. Charlotte ward was unique, for it was the only ward on which a team of teachers emerged.

Learners on Elizabeth, the low rated surgical ward, did not attend the rounds, which on this ward were more frequent due to the ward being both a surgical and a specialist ward.

Learners' attendance on the doctors' rounds seemed to be a reliable indicator of the sister's perception of the learner's role, for on all the wards, with the possible exception of Neville, learners had to postpone the

work in order to attend the round. By their action, all the sisters on the high rated wards demonstrated to the learners that they were perceived as learners as well as workers; the sisters on Charlotte and Heaton suspended work activities, and the sister on Neville, which had a very low workload, allowed the nurses to attend, although the consultant had at one time decided against it. It could be argued that the workloads on Elizabeth (low rated surgical) and Naomi (low rated orthopaedic) which were higher than all the other wards, prevented the learners from accompanying the consultants, but this reason could not be given for Irena. What mattered to the learners in the real situation when the doctors' rounds were in progress was that they felt that they were 'learners' on the three high rated wards, and 'workers' on the three low rated wards.

The Learners

It has already been estimated that the student and pupil nurses on some wards did more teaching than the trained staff, and in 76 cases (out of 524,) a learner was identified as the teacher. Teaching was done by third year students in 43 cases but learners appeared to accept a teaching role early in their training, and were prepared to pass on newly acquired skills and knowledge after remarkably short periods of time. A student in her third week on her first ward, was asked by a senior student to aspirate a Ryles tube - a job she had done for the first time the previous day. It helped her to describe the procedure to a schoolgirl helper.

> "The patient said that she felt the tube more after the last aspiration. I tested it and it was in the stomach. I explained to the schoolgirl what I was doing and this helped me to feel confident. I saw the type of aspiration."

Although the student felt competent, she needed more practice.

> "It's a simple job. The tube is in the stomach. I can't endanger life, otherwise I wouldn't have done it on my own."

In 4 per cent of the 524 cases, the learner respondent was identified as the teacher, and almost without exception felt that teaching was an important part of her training, and that she herself benefited. Typically a second year student said, "I told her about blood pressure. I don't expect her to remember, but it helps to put what I'm doing into words." And a third year student observed in a group discussion commented, "It refreshes your memory to teach someone. I've done it a lot since I came on here."

In addition to teaching, learners also initiated a high percentage of the teaching, both on their own behalf and on behalf of other learners; negotiating their way into work situations which they felt would further their training, and organising non-job teaching on wards on which the trained nurses demonstrated no interest in teaching.

Learners were able to initiate teaching by questioning other members of staff, and data from specific questionnaires on questioning, from observations, informal conversations and from interviews with learners about current events, suggested that, although learners intimated that members of the trained staff were best qualified to answer their questions, the people they asked in reality were those who were most readily available.

The reader will recall that short questionnaires, on whom learners would question in order to elicit certain types of knowledge, were given to learners working in wards at the time of observations (Appendix 16). But before giving details of the results of these questionnaires, it should be made clear that the data obtained by this method seemed to conflict with data from other sources to the extent that the researcher had to consider the possibility that, in naming certain members of staff as those whom they usually questioned, learners were selecting the people whom they would <u>like</u> to ask or <u>ought</u> to ask rather than those whom they actually asked in the real situation.

What learners said they would do did not always correspond with observed events and, in addition, learners seemed to be very reluctant to make responses in these questionnaires which would appear disloyal towards the ward staff. One student was reluctant to fill in the questionnaire because she did not feel that she could name the sister as a person whom she usually questioned, because she had not had much contact with her whilst she had been on duty. She delayed completion for two weeks, but still felt unable to name the sister, and on discussing this omission with another learner explained that she did not work with her; whereupon the other student replied that she didn't either and had "only put the sister down for one thing."

But what was of more importance was that when a group of learners were trying to find the answer to a question that had been uppermost in their minds since the previous week (when they had apparently unsuccessfully questioned the staff nurse), no one suggested that they should go and ask the sister, who was alone in the office. Furthermore, although learners named specific people in the pre-coded responses, their selection did not always correspond with comments they made about why they selected certain people, nor with information given in informal conversations nor with data obtained in interviews about their activities. One student, who responded that she would question the sister or a student about nursing theory, had earlier told the researcher that the "trained staff seem remote" and that she "hardly ever spoke to the sister" and it therefore seemed unlikely that the sister would be the person who was "usually questioned." Another student on her first ward also indicated on the questionnaire that she would usually question the sister, staff nurse or SEN, but when interviewed about an activity in which the junior sister was explaining about the collection of blood specimens, she said that she had not understood what was said and added, "I won't question if I think they're busy - normally I would ask someone more junior than a junior sister. Most nurses know

more than I do." But she had not named a student on the questionnaire, and had not questioned the sister even though the ward was exceptionally quiet.

The results of the questionnaires must, therefore, be considered in the light of other data. The questionnaires were completed by 53 learners (93 per cent of those encountered on the wards). Those who did not participate were new arrivals on the wards. Whilst there may have been some doubt about whom nurses questioned, data on those who were not questioned were consistent.

Learners would not usually question consultants because they were 'too busy' or unapproachable or in the company of the sister.

> "Many give the impression that we're too inferior to bother about."
>
> "There's no close relationship between them and ourselves, the students. They tend to treat us as insignificant members of the nursing profession."

Neither would learners usually question auxiliaries and junior nurses because they lacked knowledge, but subject to these exceptions, learners generally felt able to approach any member of the ward staff who they felt could help them; only 3 of the 53 learner respondents said that they would not usually ask the sister for any of the three reasons - one first year nurse said that she felt 'tense and frightened', another first year nurse commented that she did not work with her and a third year student indicated that the sister 'strayed off the point.'

A high percentage of the learners named the sister and staff nurse, commenting "they're more likely to know" or "they are more senior". 83 per cent of the respondents said that they questioned the staff nurse about practical aspects of nursing (how to do a particular job) and frequently made comments which suggested that the staff nurse knew the sister's likes and dislikes.

TABLE 51.

Members of staff whom learners would usually question

"Who, on this ward, do you usually ask when you want to find out how to do a particular job?"

Consultant	Doctor	Sister	Staff Nurse	SEN	Auxiliary	Student	Pupil	No. of respondents.
%	%	%	%	%	%	%	%	
0	9.4	67.9	83.0	52.8	1.9	30.2	11.3	53

"Who, on this ward, do you usually ask when you want to find out why a job is done in a particular way?"

Consultant	Doctor	Sister	Staff Nurse	SEN.	Auxiliary	Student	Pupil.	No. of respond-ents.
%	%	%	%	%	%	%	%	
0	7.5	69.8	75.5	58.5	1.9	17.0	5.7	53

"Who, on this ward, do you usually ask if you want to find out about the disease a patient may be suffering from, or some other aspect of nursing theory?

Consultant	Doctor	Sister	Staff Nurse	SEN.	Auxiliary	Student	Pupil.	No. of respond-ents.
%	%	%	%	%	%	%	%	
0	30.2	81.1	69.8	54.7	0	24.5	9.4	53

Source - Questionnaires completed by 93% of learners in wards during observation period (7% were new to ward).

"They not only know how to do it but how the sister or doctor likes it done."

67.9 per cent named the sister and 30.2 per cent would ask students (Table 51). But it seemed from the explanatory comments that learners asked whoever, in a more senior position, was available.

"I am usually working with a senior student and they aren't so busy as the trained staff."

"Because she's more in the ward than the sister who is busy with doctors (etc)".

"Because she is more on the ward than the sister and I feel it is more her work to instruct.... rather than bother the sister who has more office work to do."

Regarding questions about nursing theory, a higher percentage (81.1 per cent) said that they would usually ask the sister; 69.8 per cent named the staff nurse and 30.2 per cent said that they would usually question doctors. Table 51 shows that for all questions a majority of the learners would question trained nurses and only a minority would question learners. The trend of responses did not vary much between wards, except that on Charlotte ward (high rated surgical), no respondent said that they would usually question another learner for any reason - an interesting finding, in the light of the activity sampling which showed that the trained staff on this ward were readily available during work, and engaged in teaching sessions during the afternoons.

Because of conflicting data, the learner activity sheets from the six wards were scrutinised to ascertain whom learners had questioned during observations. From the 524 learner activities which were probed in depth, 39 questioning incidents,which had either been observed or subsequently reported by learners, came to light. (Questions sought knowledge about the 'how'and 'why' of job performance and about nursing theory). The results were interesting for they showed that learners had questioned their peers more than any other group (Table 52).

TABLE 52 Members of the ward staff questioned by learners (Source - 39 incidents observed during 524 learner activities)

Senior sister %	Junior sister staff nurse %	SEN %	Student %	Pupil %	Doctor %	Physiotherapist %	Auxiliarie %
23.1	15.4	5.1	46.2	2.6	2.6	2.6	2.6

In 18 (46.2 per cent) of the 'questioning incidents', learners had questioned student nurses - a much higher percentage than would have been expected in the light of the data presented in Table 51, in which the highest percentage of learners responding that they would usually question students was 30.2 per cent.

It seems that in completing the questionnaires, the comments which learners made in explaining why they would question various members of the ward staff, were probably a more accurate description of the reality, whilst the responses naming those questioned, were an expression of the ideal. It is interesting to note that 24.5 per cent of the respondents (to the questionnaires) qualified their answers in terms of 'availability', e.g. a student naming the staff nurse and SEN as the persons she would usually ask, qualified her answer with "the first available person whom I have confidence in to answer this", and "the first one to have a little time to spare". Therefore, those who actually taught this learner in response to her questions, would be those who were most available.

Question and answer interactions are one aspect of ward teaching and learning, and these results probably have wider implications, for it may be that those whom learners would prefer or expect to do the ward teaching (viz. the sisters and trained nurses) are not necessarily 'available' or 'at hand', and therefore when teaching is needed, those most readily available (viz. other learners) do the teaching.

Summary

There were important differences in the teaching and learning that occurred on the six wards, for on the high rated wards, there was more teaching of theory, both about work that was being done and unrelated to the work, and on two of the high rated wards (Neville and Charlotte) there was more teaching by trained members of the staff than by the untrained. (It was also evident that the sister's teaching role extended beyond the actual teaching that she did, and in the succeeding chapter it will be shown that only the sister on Charlotte positively organised her ward to satisfy the varying needs of the learners.)

Two main working hypotheses were supported:

H2 "Trained nurses teach during specialist activities"(see p 248)

H3 "Student and pupil nurses learn during some work activities."

On the basis of data discussed in this chapter it was possible to alter H3 in the following way:

"Student and pupil nurses learn during some work activities, but learning varies with the type of work, frequency of job performance, experience and stage of training of the learner, the work companion and the ward."

CHAPTER THIRTEEN

THE SISTER AND THE WARD LEARNING ENVIRONMENT

Following a search of the literature a hypothesis was formulated:

> "Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality."

In the light of the results of the first stage, which supported the hypothesis, three wards in which learners felt that they had 'learnt a lot' were paired with wards of similar specialities, in which learners felt they had learnt less (high and low rated wards), in order to highlight differences in ward activities during observations. The research focused on two main areas - teaching and learning, and ward sister activities. The objectives were twofold - firstly to identify and describe teaching and learning in high and low rated wards, and secondly to identify and describe activities undertaken by the ward sister which could account for differences in the ward learning environment.

The results discussed in Chapters 11 and 12 show that there were differences in the teaching and learning on the six wards, but that these differences were not always consistent with a previous high or low rating. It was estimated that learners on the three high rated wards (Charlotte - female surgical, Neville - male medical, and Heaton - male orthopaedic) spent more time in teaching situations than those on the low rated wards (Elizabeth, Irena and Naomi) (p. 259). It was also estimated that learners on Charlotte and Neville spent more time in teaching situations with the trained rather than the untrained, but this was not so on Heaton which was also high rated. Learning opportunities reported by learners who were interviewed about their activities varied between wards - learners on Heaton and Irena reported

fewer learning opportunities than learners on other wards, whilst learners on Elizabeth seemed to be more acutely aware of their patients as individuals (p. 225). Having demonstrated differences in the teaching and learning on the six wards, the purpose now is to account for them with particular reference to those activities which fall under the control of the ward sister.

Although the sisters in the study could not control the type of patients admitted to their wards, nor the number and type of workers, there were certain aspects of the ward environment which did fall within their control. Each sister was the undisputed manager of patient care and controlled the activities in which learners and other members of the ward staff participated, but there were variations in the way the sisters managed the wards. Sisters varied not only in their style of leadership, but in their orientation towards doctors, patients and learners, and it will be argued here that the teaching and learning that occurred in each ward was a function of the ward sister - in other words, her actions directly affected the teaching and learning. It was found that on some wards activities which the sister initiated subsequently became teaching/learning situations for the learners who participated in them, but on other wards, the sister's actions resulted in little teaching or learning.

Table 53 shows how the various activities, about which learners were interviewed, were initiated, and Table 54 shows the percentage of these activities that resulted in teaching or learning. (Data are comparable in so far as the samples of cases were obtained under similar circumstances over five mornings and five afternoons on each of the six wards - see Chapter 9 and Appendices 12 and 19). It can be seen that the sisters on Irena (female medical), Charlotte (female surgical), Naomi (female orthopaedic) and Heaton (male orthopaedic) directly initiated between 20 and 38 per cent of the various activities in the samples, but the sisters on Elizabeth (female surgical) and Neville (male medical)

initiated under 11 per cent (Table 53). The sister on Irena appeared to be responsible for little teaching or learning, for less than 40 per cent of the activities that were directly initiated by her resulted in either teaching or learning. But on Charlotte ward (which had been exceptionally highly rated by learners in the first stage of the research) a very high 90.9 per cent of the activities initiated by the sister resulted in teaching or learning.

It seems reasonable to infer from these data that when the sister on Irena intervened to direct a learner to participate in a particular activity, it was not usually done with a view to placing the learners in a teaching/learning situation. On the other hand, the high percentage of teaching or learning which resulted from the intervention of the sisters on Charlotte and Heaton tends to suggest that they initiated activities to satisfy particular learning needs. The activities which the sister on Elizabeth initiated all resulted in teaching or learning but their infrequency suggests that they would have made little impact on the overall teaching or learning.

Tables 53 and 54 also show how a relatively high percentage of ward activities in the samples were initiated indirectly by the sister via the 'routine' or general instructions. Approximately 40 to 45 per cent of these activities resulted in teaching or learning except on Irena where the percentage was much lower (28.9 per cent), and on Elizabeth ward where the percentage was much higher (68.4 per cent).

The small percentage of activities in the samples initiated by junior sisters, staff nurses or Enrolled nurses (whilst the sister was on duty) were similar on all wards ranging from 9.8 per cent on Heaton to 18.6 per cent on Charlotte. Approximately half these activities resulted in teaching or learning on all wards except Neville. On this ward almost all the activities initiated by supporting trained staff resulted in teaching or learning, and the learners themselves appeared to play a much greater part in securing a place in teaching/learning situations.

These data demonstrate not only that the sisters directly or indirectly controlled a majority of the learners' activities, but also highlight the variations in teaching or learning that resulted from their intervention.

TABLE 53

Percentage of activities initiated by various means on six wards

	Neville M.Med.	Irena F.Med.	Elizabeth F. Surg.	Charlotte F. Surg.	Naomi F.Orth.	Heato M.Ort
No. of activities	94	95	77	86	80	92
	%	%	%	%	%	%
Initiated by sister by directive or request	10.6	29.5	7.8	38.4	25.0	19.
General instructions or routine under sister's control	40.4	40.0	49.4	31.4	47.5	64.1
Initiated by junior sister, staff nurse or SEN	11.7	12.6	11.7	18.6	15.0	9.8
Learner informant initiated own participation	20.2	3.2	7.8	4.7	6.3	0
Initiated by other learners and untrained staff, or patients.	4.3	13.7	10.4	3.5	5.0	6.5
Clinical teacher or doctor	5.3	0	11.7	1.2	0	0
Other	7.4	1.1	1.3	2.3	1.3	0

Note: For percentage of activities which resulted in teaching or learning see Table 54

Table excludes lone learner activities.

TABLE 54

Percentage of activities initiated under each head which resulted in teaching or learning

	Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heato M.Ort
No. of activities	94	95	77	86	80	92
Initiated by sister by directive or request n=	10	28	6	33	20	18
Percentage resulting in teaching or learning	70.0%	39.3%	100.0%	90.9%	60.0%	88.
General instructions or routine under sister's control n=	38	38	38	27	38	59
Percentage resulting in teaching or learning	44.7%	28.9%	68.4%	44.4%	36.8%	44.
Initiated by junior sister, staff nurse or SEN n=	11	12	9	16	12	9
Percentage resulting in teaching or learning	91.0%	50.0%	44.4%	50.0%	50.0%	44.4
Learner informant initiated own participation n=	19	3	6	4	5	0
Percentage resulting in teaching or learning	84.2%	100.0%	66.7%	75.0%	100.0%	---
Initiated by other learners and untrained staff, or patient n=	4	13	8	3	4	6
Percentage resulting in teaching or learning	75.0%	38.5%	62.5%	66.7%	25.0%	83.
Clinical teacher or doctor n=	5	0	9	1	0	0
Percentage resulting in teaching or learning	80.0%	--	77.8%	100.0%	--	--

Note: The size of some sub-samples is small since the percentage of activities initiated by various means differed from ward to ward. (See Table 53).

The Organization of Work Activities

The sisters on the six wards had been in post for between 5 and 17 years and on all wards, it was apparent that within the framework of the routine all learners knew what the sister expected of them. The degree of routinisation varied from ward to ward, but a major similarity was that basic repetitive work was more highly routinised than the technical work.

Much was been written about routinisation of hospital work as a means of getting the work done and relieving anxiety when there is a constant changeover of staff and patients (Abel-Smith 1960, Menzies 1960, Katz and Kahn 1966, Davies 1976), and in this study learners were observed proceeding from job to job with minimal communication and consultation. Data from learners who were interviewed during observations show that they were able to do this because instructions about work - particularly basic work - were incorporated into the routine.

Sisters who were interviewed in the first stage said that the bulk of the work on all the wards was basic nursing (such as bed-baths and care of pressure areas) but this could not be verified during observations. The intense nature of the observation/interviewing schedule meant that the type of activities in which all types of ward staff were engaged in, could not be recorded on the 10 minute activity sampling sheets, because there was not sufficient time for one observer to observe and record everything. Consequently it was not possible to quantify basic and technical activities on each ward or, subsequently, to estimate the percentage of the learner's work that was routinised. However, the strong impression was gained, particularly on the

orthopaedic and medical wards, that the bulk of the work that learners were doing in the mornings was of a basic nature, with nurses moving from one patient to another to wash, bath or otherwise attend to his comfort. On the surgical wards, basic work was interspersed with technical activities, as wounds were dressed and patients taken to and from the operating theatre.

Although the learner activities that were probed in depth were not selected by random sampling, they were representative of the type of activities occurring on the wards, and yielded important data both on teaching and learning, and aspects of ward organisation. In order to find out how and from whom learners received their orders, learners were specifically asked the reason why they engaged in particular activities. Analysis of the responses from those interviewed showed that on each ward there was a routine for allocating the majority of basic activities (over 60 per cent) and a minority of the technical activities, so that learners did not need constantly to seek advice on what to do or how to do it. Whilst the majority of the basic activities were distributed via the 'routine' or 'general instructions' both trained nurses and the learners themselves appeared more ready to intervene in the distribution of technical tasks. With the exception of Elizabeth ward a high percentage of the technical activities that were included in the sample were individually allocated. (Table 55).

TABLE 55

Reasons learners on six wards gave for engaging in basic and technical work activities. (Source - interviews with learners about observed activities.)

Basic Activities

Speciality	Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Ortho.	Heaton M.Ortho
No. of activities	33	47	31	35	63	47
	%	%	%	%	%	%
Initiated by sister by directive or request	9.1	17.0	6.5	11.4	22.2	4.3
Work book/routine/ next patient	21.2	42.6	19.4	22.9	15.9	51.1
"Work needed doing"	39.4	17.0	25.8	40.0	11.1	25.5
Allocated to group of patients or one side of ward	0	0	16.1	2.9	38.1	2.1
All general instructions under sister's control	60.6	59.5	61.3	65.8	65.1	78.7
Initiated by junior sister, staff nurse or SEN	18.2	8.5	16.1	22.9	6.3	8.5
Learner informant initiated own participation	6.1	0	3.2	0	0	0
Initiated by learners, untrained staff or patients	6.1	14.9	12.9	0	6.3	8.5
(Negotiation or freedom to do specific activity	6.1	0	3.2	0	0	0)

(cont.)

TABLE 55 (cont....

Reasons learners on six wards gave for engaging in basic and technical work activities. (Source - interviews with learners about observed activities.)

Technical activities

Speciality	Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heaton M.Orth.
No. of activities	34	38	45	36	22	22
	%	%	%	%	%	%
Initiated by sister by directive or request	23.5	50.0	8.9	38.9	36.4	50.0
Work book/routine/ next patient	17.6	5.3	8.9	2.8	9.1	0
"Work needed doing"	14.7	2.6	24.4	11.1	4.5	18.2
Allocated to group of patients or one one side of ward	0	0	13.3	2.8	4.5	0
All general instructions under sister's control	32.3	7.9	46.6	16.7	18.2	18.2
Initiated by junior sister, staff nurse or SEN	8.8	18.4	11.1	25.0	31.8	22.7
Learner informant initiated own participation	26.5	7.9	8.9	8.3	13.6	0
Initiated by learners, untrained staff or patients	5.9	10.5	11.1	8.3	0	9.1
Initiated by clinical teacher or doctor	2.9	0	13.3	2.8	0	0
Other	0	5.3	0	0	0	0
(Negotiation or freedom to do specific activity	33.3	12.1	15.9	25.0	16.7	9.1)

NOTE: Table includes lone learners and excludes doctors'rounds.

Although learners had little freedom on which basic activities to do, on some wards they were able to engage in negotiations to do or watch technical activities such as drug rounds or dressings which they felt were appropriate to their learning needs. It should be noted, in passing, that no learner on any ward asked to perform a basic activity in order to satisfy a learning need - these activities were not felt to be particularly important for the learners' education (see Chapter 11). However, there were important differences in the responses from the six wards which gave some insight into the sister's style of leadership.

The sister's style of leadership.

Whilst the research was in progress it was observed that the styles of the sisters were different. In particular, it was observed that sisters differed in one important aspect of leadership - the method of order-giving. Some sisters gave direct instructions, others invited discussion and allowed discretion. The styles of leadership were observed to be similar to those described by White and Lippitt (1972) following an investigation into leadership styles in a boys' club. They identified three types which fell within the normal range of leadership - autocratic, democratic and laissez-faire. (see earlier discussion p. 48).

Their typology provided a starting point for data analysis, but it was necessary to make some modifications because this research was conducted in hospital wards where activities have traditionally been dominated by hierarchy and routine, and not in a boys' club. The leaders in the White and Lippitt study served the needs of only one group, but the ward sister serves two client groups - patients and learners (and, it could be argued that, depending on her orientation, she also serves a third group - consultants). It was found that an attempt to describe all the differences in ward sister behaviour in terms of autocratic, democratic or laissez-faire leadership styles produced distortions.

For instance, White and Lippitt described how the autocratic leader remained aloof from the group except when demonstrating. However, in this study, a sister could be autocratic in the sense that she dictated work tasks and companions, although she did not remain aloof from the group whilst giving patient care. In order to provide an accurate analysis, it was necessary to relate the time the sister spent with learners to the time she spent with other groups. It was also important to consider whether or not a sister was demonstrating an activity for the benefit of a learner (i.e. fulfilling a teaching role) or giving care for the benefit of a patient, without demonstrating. Therefore, the time the sister spent with learners was not used as one of the criteria for determining leadership style, and data were analysed separately to describe the sister's teaching role.

White and Lippitt described key activities which were undertaken by each type of leader to organise subordinates. The autocratic leader determined all policies, dictated activities one step at a time and dictated work tasks and companions. The democratic leader encouraged group decisions and allowed group members to choose work and partners. The laissez-faire leader left the group members to make their own decisions and did not intervene to determine tasks and companions. Sisters were classified as autocratic, democratic or laissez-faire on the basis of order-giving using data presented in Table 55. These data show how learners on the six wards received orders or instructions to participate in basic and technical activities. In principle, the key activities undertaken by the three types of sister were similar to those described by White and Lippitt - the autocratic sister dictated activities and companions to a greater extent than the other types; the democratic sister gave subordinates some discretion in the work that they did but specified that seniors should work with juniors; and the laissez-faire sister left the learners to determine tasks and companions and intervened less than the other two types of sister. The classification of the

sisters was as follows: - the sisters on Irena (female medical), Naomi (female orthopaedic) and Heaton (male orthopaedic) were autocratic leaders the sisters on Neville (male medical), and Charlotte (female surgical) were democratic leaders; and the sister on Elizabeth ward (female surgical and gynaecology) was a laissez-faire leader.

Autocratic leadership

The results of the interviews with learners about why they engaged in particular ward activities suggested that the main features of autocratic leadership were rules and a rigid routine, which implicitly communicated to the workers, who were predominantly learners, what, when and how various types of activity were to be done. Table 55 shows how the technical activities on Irena, Naomi and Heaton wards were allocated by directive rather than negotiation: on Irena and Heaton wards the sisters initiated 50 per cent of the technical activities which were the subject of interview. Nurses were generally told what to do as opposed to being given some discretion. There were no recorded instances of learners being asked whether or not they would like to do something, on either Heaton or Irena wards, and only one on Naomi. Instructions were given, and learners conformed. The sisters likes and dislikes were enforced as if they were rules. In contrast to the boys in the White and Lippitt study who, under an autocratic leader, experienced uncertainty about future steps, learners who worked under an autocratic sister knew precisely what was expected of them.

Whilst learners on all wards made responses which demonstrated that a high percentage of the basic activities were allocated through what might be termed 'general instructions', the nuance of the comments from learners on Irena (female medical) and Heaton (male orthopaedic) suggested the routines on these two wards differed fundamentally from those on other wards - there was a 'rigidity' which was not present on the other wards. There was a system of 'task allocation' of work and

learners conveyed the notion that certain things were always done at certain times or in certain ways. Of the basic activities, 42.6 per cent on Irena and 51.1 per cent on Heaton were prescribed either in a work book or via the routine - this was much higher than on the other wards. (Table 55).

Learners on Naomi (female orthopaedic) did not talk about the routine in the same terms, or as often, as the learners on Irena or Heaton, and explained in 38.1 per cent of the basic activities, that they were assigned to 'one side of the ward' with a particular partner, by the sister. The sister usually wrote a work list, but sometimes gave instructions verbally. Since the sister also spent a higher percentage of her time than the other sisters giving direct care to patients, she was frequently in the ward and, therefore, in a position to give individual instructions about basic care. She gave direct orders about 22.2 per cent of the basic activities which were the subject of interview. (Table 55).

Democratic leadership.

Democratic leadership was typified by teamwork, negotiation and a more flexible routine. Both democratic sisters - those on Charlotte (female surgical) and Neville (male medical) - prescribed the care for patients in a book or nursing Kardex. Having specified that trained nurses should work with learners, they gave nurses some discretion as to which work would receive priority and by whom it would be performed. When asked why they were doing basic activities, learners involved in 40 per cent of the cases on both wards responded that 'the work needed doing' rather than that it was 'routine', thus conveying a more flexible approach.

Learners had freedom to participate in over a third of the technical activities on Neville and a quarter of those on Charlotte (Table 55). Although the sister on Charlotte and the other trained nurses initiated a high percentage of the technical activities, they often 'invited' rather than 'commanded', viz. "Sister asked who would like to do it", rather than "Sister told me".

Laissez-faire leadership.

Laissez-faire leadership was typified by 'non-intervention'. There was evidence to suggest that the sister on Elizabeth ward (female surgical and gynaecology) was a laissez-faire leader. Table 55 shows how only 8.9 per cent of the technical activities on this ward were initiated by the sister - a low percentage in comparison with other wards - whilst a much higher percentage was initiated through 'general instructions'. The sister on Elizabeth ward prescribed the care for each patient in a book in much the same way as the sister on Charlotte, but whereas the democratic sister assigned teams of trained and learner nurses to share the work, the laissez-faire sister left the learners to get on with the work without determining tasks or companions. The sister believed in a system of 'total patient care' - a system in which all the care that a patient needed at a particular time was given by the same nurse(s), as opposed to 'task allocation' in which care was broken up into a series of tasks done by different nurses. But because the sister did not assign trained nurses to work with them, it was the learners who were usually left to do the bulk of the repetitive work, either alone or with other learners. They had to make their own decisions about work companions and priorities.

The sister's orientation

Because of the complexity of the ward sister's role, it was not possible to explain all the differences in the ward environment in terms of autocratic, democratic or laissez-faire leadership. The style of leadership outlined so far was based on the methods used by the sisters to give orders to the learners about the work they were to do. But it was also necessary to consider the orientation of the sister in terms of how she spent her time and to whom she gave priority.

In performing her duties, the ward sister is involved with patients, doctors and learners. She has to divide her time between the various groups and when there are conflicting demands must give her attention to one group in preference to another. It is worth noting at the outset, that of the sisters who were interviewed in the first stage, no sister delegated the consultant's round to anyone else when she was on duty, but most delegated teaching or patient care on some occasions. From this can be inferred the primacy of service to consultants in the hierarchy of tasks which the sisters had to do.

Bendall (1973) suggested that "the ward sister's orientation could be used as one measure of the environment" (p. 38). She felt that there were two extremes - one who gave patients first priority and another who gave doctors first priority. During observations it was observed that sisters varied in the time and attention they devoted to doctors and patients in relation to other groups. But a third type was observed - one who appeared to give priority to administration.

Sisters were classified on orientation according to how they spent their time, as doctor, patient or administration orientated. Data from 10 minute activity sampling provides the basis for the classification, but account is also taken of qualitative data which

was collected during key events. The orientation is inferred from what the sister did in reality when faced with conflicting demands, rather than from what she might have preferred to do in ideal circumstances. The sisters' activities are set out in Table 56 using categories adapted from those suggested by Inman (1975 p. 107). Other tables have also been consulted to take account of other factors which are not immediately apparent from this table alone.

The classification of the sisters on orientation was as follows: - the sisters on Neville (male medical), Irena (female medical) and Elizabeth (female surgical and gynaecology) were doctor orientated: those on Charlotte (female surgical) and Naomi (female orthopaedic) were patient orientated and the sister on Heaton (male orthopaedic) was administration orientated. (Table56).

TABLE 56

Senior sister activities during five mornings (9 a.m. to 12 noon and five afternoons (2 p.m. to 4 p.m.) - 10 minute activity sampling

Categories adapted from Inman (1975 p. 107).

Ward	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton
Speciality	M.Med.	F.Med.	F.Surg/gyn.	F.Surg.	F.Orth.	M.Orth
Sister activity N=	142	150	150	143	146	139
	%	%	%	%	%	%
Rounds or talking to doctors	21.8	16.0	24.7	11.9	10.3	7.2
Working on Kardex, files, case notes or office work	14.1	18.7	12.0	9.8	19.9	24.5
Medicine round	8.5	3.3	3.3	0	1.4	2.2
Instructions or other talk to nurses and other staff	27.5	22.0	23.3	22.4	18.5	18.0
Talking to patients	5.6	8.0	13.3	10.5	8.2	10.1
Assisting patients	4.9	12.7	12.7	17.5	28.8	15.8
Talking on telephone	0	1.3	1.3	4.9	6.2	2.9
Talking to visitors	5.6	4.7	0.6	8.4	2.7	5.8
Other (meal break, unit meeting, off ward).	12.0	13.3	8.7	14.7	4.1	13.7
Orientation	Doctor	Doctor	Doctor	Patient	Patient	Admin

Doctor orientation

St. Joan's hospital had, at one time, been under the management of a separate Administrator and Matron, from St. Anne's, and whether or not traditions peculiar to this hospital persisted, which contributed to the orientation of the sisters there, is not altogether clear, but it is interesting to note that the sisters on Neville, Irena and Elizabeth wards were all 'doctor orientated'. They spent more time than the other sisters in 'rounds or talking to doctors', and less time 'assisting patients' - i.e. participating in basic and technical activities with patients. (Table 56).

A learner in the first stage of the research had commented on the high place accorded the consultants at the hospital - "they thought they were gods", and there was some evidence that whatever they thought of themselves some sisters treated them with deference and gave them immediate call on their time. The consultant's place at the top of the hierarchy appeared to be acknowledged, not only by the sisters, but also by more senior nurse administrators. On one occasion a consultant arrived as a nursing officer and was about to start a round with the ward sister. The sister left the nursing officer, who withdrew from the ward, remarking to the researcher, "If it was a more junior doctor, I would hold my ground - as it is, I shall retire gracefully." Meanwhile the sister, who had collected books and papers from the office, ran into the ward after the consultant.

It could be argued that the time the sisters on the two medical wards (Neville and Irena) spent on rounds, was due to the nature of the speciality, but the fact remains that the sister on Neville did not spend as much time with patients, despite - or perhaps because of - a very low work load, and when a round on Irena was cancelled, the sister did not give her time to either patients or learners. It is

also possible that the sister on Elizabeth ward spent more time on 'rounds and talking to doctors' because both surgical and gynaecological medical 'teams' visited the ward. This may well be a valid point, but it should be noted that the sister on the other surgical ward (Charlotte) delegated the maximum amount of administrative work to the ward clerk, with the result that she had more time to 'give' to patients and learners in the afternoons. Clerks on both wards were employed for similar periods, but the one on Charlotte was allowed to do a wider range of administrative work than the one on Elizabeth. The morning activities of the sister on Elizabeth were very similar to those of the sister on Charlotte, but in the afternoons she spent 21.7 per cent of her time on 'office work' as opposed to 5.7 per cent spent by the sister on Charlotte, and when she was engaged in office duties, she was often joined by trained nurses and junior doctors who talked to her whilst she worked, so the time she spent with doctors was higher than the 24.7 per cent shown in Table 56.

Patient orientation

The sisters on Charlotte (female surgical) and Naomi (female orthopaedic) were patient orientated, and on more than one occasion forcibly expressed their commitment to the patients. The sister on Naomi spent 28.8 per cent of her time directly assisting the patients on her ward - this was far more than any other sister (Table 56). Her priorities can best be summarised in the comment she made when it appeared that there were going to be further demands on her time which would take her away from her patients - "All I want to do is to look after my patients."

Similarly, the sister on Charlotte, who spent the second highest percentage of her time assisting or talking to the patients, at one time expressed the view - "If we give good patient care, that's everything...

talking to the patient, gaining the confidence of the patient - that's nursing. Dead stop. Everything for the patient." These two sisters also spent the most time doing basic and technical work with the learners (Table 57).

TABLE 57

Percentage of time spent by senior sisters in basic and technical activities with the learners (10 minute activity sampling on five mornings and five afternoons).

Ward	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton
No. of activities	142	150	150	143	146	139
Sister with learner in basic or technical activity (excl. doctors' rounds)	4.2%	10.0%	5.3%	11.2%	16.4%	5.8%

Both patient orientated sisters thought highly of their ward clerks. During the observation period on Naomi ward, the ward clerk went on holiday - a fact of which the researcher was constantly reminded, and there was a noticeable increase in the time the sister spent in office work, particularly in the afternoons. But as soon as the ward clerk returned, the sister returned to giving direct care to the patients. Learner nurses found working with the sister confirmed that this was a 'usual'occurrence. The sister on Charlotte ward spent the least time on administration - due no doubt to the active delegation of a wide variety of administrative duties to her ward clerk.

Administration orientation

Although the sister on Heaton (male orthopaedic) attended to the needs of both doctors and patients it could not be said that she was orientated towards either group. However, by her own choice, she was the only sister who did not have a ward clerk. Consequently, she spent more time in administration than any other sister. A quarter of her time was spent in office work (24.5 per cent) (Table 56). In the mornings she spent 10 per cent more time in office work than the other sisters. On the basis of these data she was classified as administration orientated.

TABLE 58

Classification of sisters on leadership style and orientation

Orientation	Leadership style		
	Autocratic	Democratic	Laissez-faire
Doctor	1	2	3
Patient	4	5	6
Administration	7	8	9

The classification of the sisters on style of leadership and orientation was thus generated from the data. (Qualitative data supported the classifications and are introduced in the discussion of individual wards in the latter part of this chapter). There are nine possible types (Table 58). The reader will note that all the sisters in the second stage of the study received a different classification, as follows:

Irena:	Autocratic/doctor orientated.
Neville:	Democratic/doctor orientated.
Elizabeth:	Laissez-faire/doctor orientated.
Charlotte:	Democratic/patient orientated.
Naomi:	Autocratic/patient orientated.
Heaton:	Autocratic/administration orientated.

Since this aspect of the research is essentially exploratory they must be regarded as a first step towards an understanding of the complex nature of the ward sister's role. The style of leadership which has been outlined is concerned primarily with the methods used by the sister to organise her workforce to do the work which derives from the patients. It is suggested that, under an autocratic leader the learners and other workers have little discretion in their work and do what the sister or her immediate subordinates tell them to do, whilst under democratic or laissez-faire leadership, the learners have more discretion. Since the needs of the learners must be satisfied concurrently with those of the patients, it is inevitable that the style of leadership impinges on the way learners' needs are defined. Therefore to some extent the needs of learners under autocratic leadership are defined by the sister; under democratic leadership learners are able to enter into negotiations with trained nurses in order to define their own needs: but under laissez-faire leadership they are able to negotiate their needs mainly in conjunction with other learners with whom they work.

With the possible exception of Elizabeth ward, where the workload and turnover of patients were often exceptionally high (see chapter 10,) there was ample evidence to suggest that the way the sister spent her time was a produce of her own preferences and priorities. Within certain limitations, the sister did what she did because it was what she wanted to do. Each sister had her own routine, and when opportunitie

presented themselves to do something different - for instance - when a doctor's round or operating session was cancelled, she did not pursue activities, or associate with groups which were outside her routine. What was abundantly clear was that a sister who did not normally take part in teaching sessions, did not suddenly gather the learners about her in order to teach them, when patients or doctors temporarily had no need of her services. Despite the high priority which some sisters had accorded teaching during interviews in the first stage of the research, with the exception of the sister on Charlotte ward, teaching learners - particularly away from the job - was observed to be very low down in the order of priorities.

The sister's teaching role.

Data from which the conclusions for this section are drawn, were qualitative rather than quantitative. The activities of the sisters were sampled at 10 minute intervals on each ward, and the majority of the activities in which the sister was working with, or in the presence of, a learner nurse, were the subject of interview in order to find out the nature of any conversation or demonstration. Observations took place during five mornings and five afternoons in order to sample the type of activities occurring at 'busy' and 'slack' periods. Ward report sessions were not usually observed since these were given prior to observations and during the lunch break. Data from informal conversations or incidents which contributed to an understanding of the sister's teaching role were recorded in field notes so that incoming data from other sources could be cross-checked. An attempt was made to look beyond the teaching which the sister actually did, and to describe other activities which she undertook to change a working environment to a learning environment. In spite of methods which were designed positively to seek out data on the sister's teaching activities, data from some wards was sparse.

Since the ward sister fulfills a dual role as manager of patien: care and teacher, it is inevitable that activities concerned with each role impinge upon the other. On the one hand the sister is involved with the student and pupil nurses, in the type of interactions which occur in any work situation between a leader and subordinate worker, and on the other, she is involved in activities which are designed to satisfy the needs of a learner. These include not only the teaching which she herself does, but also teaching and learning situations which she initiates. Whilst the sister's teaching role is closely related to her style of leadership and orientation towards the various groups, data from a variety of sources suggest that some facets of the teaching role function independently.

During observations there appeared to be wide variations in the way each sister fulfilled her teaching role, and it is suggested that what the sister did was dependent on her perception of student and pupil nurses - whether they were 'learners' who also worked, or 'transien workers' who needed to learn how to do the work that had to be done on a particular ward.

It is helpful to consider the teaching role as having two dimensions at opposing ends of a continuum - active and passive. The sister who perceives the student or pupil nurse as a 'learner' client with special educational needs, actively pursues a teaching role, and the sister who perceives the learner as a 'worker' who serves the patient client, engages in no extra activities other than those which are necessary to equip any worker with skills to do the work. Thus, as far as teaching is concerned, the former role is essentially an 'active' role and the latter a 'passive' role.

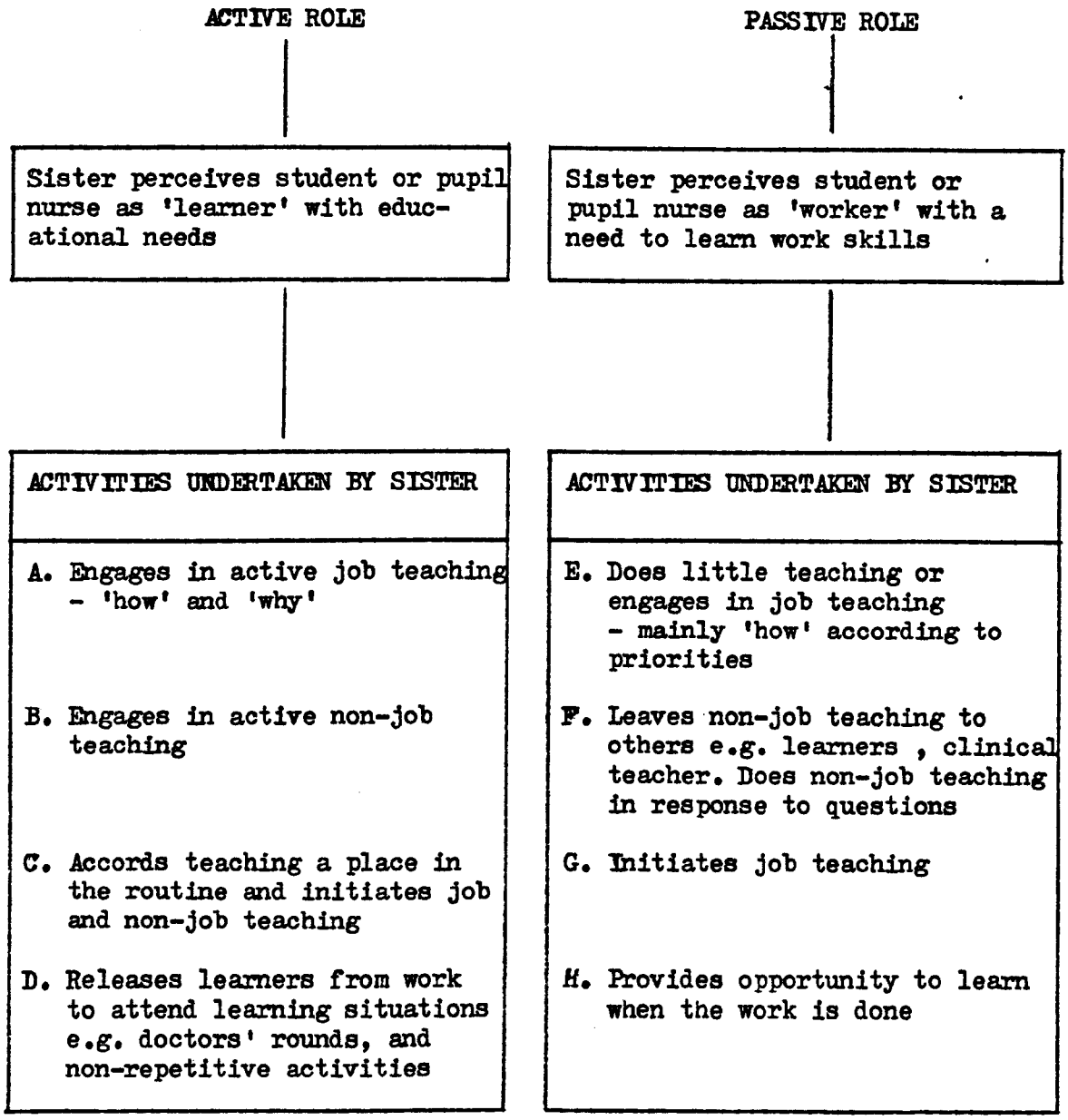
Figure 7 summarises the main features of the sister's teaching role and identifies the key differences between the active and passive roles. There are four main facets to the teaching role - job teaching, non-job teaching, the initiation of teaching by others, and the provision of opportunities for the students or pupils to learn.

Because of statutory training requirements all sisters in charge of wards to which learners are allocated are periodically faced with the problem of introducing new student and pupil nurses to the type of work occurring on their particular ward. As leader of the work force the sister is inevitably involved in ensuring that the learner-worker is able to do work which has not previously been encountered. Job teaching or delegation of job teaching to other ward staff is, therefore, obligatory, in the sense that the consequence of not doing it means that workers may be unable to do work which has to be done.

Whether the sister fulfills an active or passive role, job teaching is part of it, but the key difference between the two roles turns on the teaching of theory. The sister in the passive role - if she teaches at all - teaches a minimum of theory both whilst working with learners, and away from the job. But in an active role the sister teaches the theory behind the job by explaining why things are being done and why they are being done in a particular way.

Observation of sister activities at ten minute intervals showed that overt teaching by the six sisters was negligible, varying from 0 per cent on the two medical wards to 4.9 per cent on Charlotte. (Table 59 This was consistent with previous work studies which showed that sisters did little teaching (Goddard 1963, Ministry of Health 1968, Scottish Home and Health Department 1969).

Figure 7 The sister's teaching role



However, in this study, it was possible to calculate the amount of time spent in covert as well as overt teaching, because, in the majority of cases in which a sister was observed with a student or pupil nurse during 10 minute activity sampling, the learner was subsequently interviewed to find out what had occurred. In some cases they described teaching which had not been observed. Activity sampling showed that sisters spent between 8.0 per cent and 24.7 per cent of their time with the learners but activities representing between 1.4 and 5.4 per cent of this time were not the subject of interview (Table 59). On all the wards, the covert teaching was equal to, or more than, the overt teaching, varying from only 1.3 per cent on Irena ward to 8.4 per cent on Charlotte. Thus the time spent in overt and covert teaching by the six sisters ranged from 1.3 per cent on Irena to 13.3 per cent on Charlotte. In addition to the teaching they actually did, the sisters on Neville, Charlotte and Heaton were also present when others (usually the consultants) did some teaching. The time the sister spent in teaching situations, therefore, varied from only 1.3 per cent on Irena to 17.5 per cent on Charlotte. It was difficult to draw any conclusions about the differences in teaching from these figures alone because the proportions of time spent in teaching by the sisters on all the wards except Charlotte were so low - less than 10 per cent.

The time the sisters spent in teaching was, in effect, the time they devoted to satisfying the needs of learners in their wards. When the time spent in overt and covert teaching was compared to other sister activities, it was found that the sister on Charlotte ward was the only sister who spent more time in teaching, than in 'rounds or talking to doctors' or in administration (Table 60). The only firm conclusion that could be drawn was that the sister on Charlotte gave teaching learners a higher priority than the other sisters did. These figures suggested that she actively pursued a teaching role.

TABLE 59

Overt and covert teaching by sisters on six wards during five mornings and five afternoons. (Data source - 10 minute activity sampling and interviews with learners about observed activities)

Ward	Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heaton M.Orth.
N =	142	150	150	143	146	139
Time spent by sister with learners n =	19	25	12	35	36	12
	13.4%	16.7%	8.0%	24.5%	24.7%	8.6%
Sister/learner activities not investigated by learner interview	4.2%	4.7%	2.7%	2.1%	5.4%	1.4%
Sister/learner activities investigated but no teaching found	2.1%	10.7%	1.3%	4.9%	10.9%	0
Teaching by others in sister's presence	4.9%	0	0	4.2%	0	1.4%
Overt teaching by sister	0	0	2.0%	4.9%	3.4%	1.4%
Covert teaching by sister	2.1%	1.3%	2.0%	8.4%	4.8%	4.3%
Overt and covert teaching by sister	2.1%	1.3%	4.0%	13.3%	8.2%	5.7%
Time spent teaching and in teaching situations	7.0%	1.3%	4.0%	17.5%	8.2%	7.1%

TABLE 60

Time spent by sisters in 'rounds/talking to doctors', administration and teaching. (10 minute activity sampling).

Ward	Neville	Irena	Elizabeth	Charlotte	Naomi	Heaton
Speciality	M.Med.	F.Med.	F.Surg.	F.Surg.	F.Orth.	M.Orth
N=	142	150	150	143	146	139
	%	%	%	%	%	%
Rounds/talking to doctors	21.8	16.0	24.7	11.9	10.3	7.2
Working on Kardex, files, office work	14.1	18.7	12.0	9.8	19.9	24.5
Overt and covert teaching ref. table 59	2.1	1.3	4.0	13.3	8.2	5.7

Analysis of data from a variety of sources showed that the type of teaching activities undertaken by the six sisters varied considerably and it proved possible to allocate sisters a place on an active/passive teaching role continuum. The sister on Charlotte was the only sister to satisfy all the criteria of the active role, shown in Figure 7; the sister on Heaton was actively inclined; the sisters on Naomi, Elizabeth and Neville were passively inclined and the sister on Irena undertook all the activities associated with the passive role. (Figure 8).

In order to find out what type of teaching the sisters did when with the learners, viz. job 'how', job 'why' or non-job, all the cases involving the sisters were reviewed. The number of relevant activities ranged from 8 on Elizabeth to 32 on Charlotte. It was estimated that the sister on Charlotte spent 13.3 per cent of her time in teaching, and data from all sources (learner interviews, field notes compiled during observations and informal conversations) confirmed that she engaged in all types of teaching. Table 61 shows how most of the job teaching took

Figure 8

Teaching Roles of the Sisters on Six Wards

Active Role	Actively Inclined	Passively Inclined			Passive Role
Charlotte	Heaton	Naomi, Elizabeth, Neville.			Irena
ABCD	ABDGH	EF	EFH	DEFGH	EFGH
13.3%	5.7%	8.2%	4.0%	2.1%	1.3%

Note: The letters refer to the activities undertaken by the sister, in Figure 7, and the numbers to the percentage of time spent in overt and covert teaching.

TABLE 61

Type of teaching done by sisters on six wards. (Data source - interviews with learners about observed sister/learner activities).

	Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heaton M.Orth
No. of activities	12	21	8	32	28	11
Basic activities n=	1	11	1	3	14	1
No teaching	1	8	0	1	7	0
Job 'how'	0	3	0	1	5	1
Job 'why'	0	1	(1-non job)	1	(1-non job)	1
Teaching by another				(1)		
Technical activities n=	10	8	5	19	9	10
No teaching	2	7	0	5	4	1
Job 'how'	2	1	3	10	5	6
Job 'why'	1	0	4	7	1	5 (2 no job)
Teaching by another	(6)			(5)		(2)
Informational/ Relational n=	1	2	2	10	5	0
No teaching	0	1	1	3	2	0
Non-job teaching	1	1	1	7	3	0

place during technical rather than basic activities. Teaching methods included demonstrations (individually and in groups) which were accompanied by detailed explanations of specific techniques and underlying principles. The sister was the only one observed in formal group teaching situations and there was confirmation from a number of learners that teaching was a regular occurrence. The sister was observed initiating both job and non-job teaching by trained and learner nurses, and on the day prior to observations commencing on the ward, was overheard questioning the staff nurse to ascertain whether a teaching session had taken place the previous afternoon when the sister had been off duty. No other sister was found to have initiated non-job teaching by other members of the ward staff during the period of observation. The sister on Charlotte released learners from work in order to attend consultants' rounds and organised demonstrations of non-repetitive techniques. The sister on this ward was unique because she imposed a teaching role on trained and learner nurses, and accorded teaching a place in the routine. The active delegation of teaching to other members of the ward staff ensured that teaching kept its place in the routine.

The sister on Heaton (high rated male orthopaedic ward) was the only sister who could be described as 'actively inclined' but data on which this allocation was based were by no means conclusive. Data from learners in the first stage of the study suggested that teaching sessions given by the trained staff, particularly the sister, were a regular feature of ward activities, but none were encountered. Observations on the ward spanned six weeks and were interrupted by a three weeks holiday taken by the sister, but learners allocated to the ward for this period brought to the researcher's attention only one teaching session which had been given during a weekend immediately prior to the start of observations. However, a second year student

who had been on the ward for 5 weeks before the sister went on holiday said, "Sister often lectures if we're not busy", and a first year student on Charlotte who had recently worked on Heaton informed the researcher that "the staff (on Heaton) gave lectures". There was, therefore, some reason for believing that the sister's own routine which included non-job teaching had been disrupted by her holiday. However, non-job teaching was not delegated to other members of the trained staff who were on duty with the sister, so regular teaching sessions lapsed when the sister did not take them.

With one exception, all the job teaching given by the sister on Heaton occurred during technical activities, and included detailed explanations and demonstrations (Table 61). Two non-job teaching episodes were observed after the sister had returned from the operating theatre with patients. On each occasion she subsequently gave an account of what the patient had had done, to the nurse who had accompanie her. She also encouraged learners to attend doctors' rounds and to study on their own when the work was done in the afternoons. Trained nurses were asked to teach during technical activities such as drug rounds and giving injections.

The sister on Naomi (low rated female orthopaedic ward) was typed as 'passively inclined' despite the estimate that she did more teaching than her counterpart on Heaton ward. Almost all the job teaching she did comprised advice on how the job should be done and occurred during both basic and technical activities (Table 61). Much of the teaching that she did was 'patient centred' in the sense that the sister gave advice on how learners should give direct physical care - such as giving more support to a patient's shoulders, telling the patient to take a "lot of little steps", and, on hearing a patient scream, instructing learners that they should wait until an extra person was available before getting a patient out of bed.

Of the four non-job teaching activities that were observed, three followed questions from learners and the fourth took place between jobs whilst the sister was working with a first year student - according to another learner this was not unusual. Although no formal teaching sessions were observed the researcher was told of one lecture on the ward, but there were no other data to suggest that this was a regular event. The sister did not directly initiate either job or non-job teaching by any other member of the ward staff, neither were learners released to go on doctors' rounds or given an opportunity to study in the one quiet afternoon during the observation period. Thus the sister's teaching role did not appear to extend beyond her own teaching.

The sister on Elizabeth (low rated female surgical/gynaecological ward) spent 4.0 per cent of her time in teaching, and what little job teaching she did during the five mornings and afternoons took place during technical activities and included teaching a pupil about drugs on a drug round, explaining to a learner who was new to the ward how and why to dress a patient's wound and, in response to a student's request for instructions, ordering oxygen for a patient who had returned from theatre. Two non-job teaching activities were observed - one took place whilst she made an empty bed with a learner and the other was a statutory assessment. The sister did not directly initiate any teaching other than that in which she herself was involved and the activity sampling showed that it was rare for any other member of the trained staff to take a learner with her either on a drug round or to do a dressing; they usually went alone or with another trained nurse. Learners did not go on doctors' rounds but were allowed to study when the work was done - an infrequent activity because of the heavy workload. The sister on Elizabeth was 'passively inclined'.

The sister on Neville (high rated male medical ward) was 'passively inclined' and spent only 2.1 per cent of her time teaching. Only three teaching activities came to light during five morning and five afternoons - she taught one learner on a drug round (but was observed alone or with a trained member of staff on six), was a 'passive teacher', whilst a learner watched her giving an injection, and briefly taught following a question. The sister acknowledged her own limited teaching role at interview but indicated that her immediate subordinate trained colleagues enjoyed and did teaching. There was no direct evidence to suggest that the sister initiated non-job teaching by trained nurses, but they were frequently observed to join learners in the afternoons for discussions, rather than formal teaching sessions - although a learner who had been on the ward for less than two weeks said that the junior sister had given one 'talk'. The sister seemed content to leave the teaching to the clinical teacher and colleagues, but was active in arranging for students (both junior and senior) to attend non-repetitive activities and go on doctors' rounds, and frequently initiated job teaching. Whether or not activity C, Figure 7 (i.e. "Accords teaching a place in the routine and initiates job and non-job teaching by trained and learner nurses"), should be assigned to the sister on Neville is uncertain. Since the sister openly acknowledged her limited teaching activities, it is highly probable that other trained nurses took over the non-job teaching by mutual arrangement.

The sister on Irena (low rated medical ward) fulfilled a 'passive teaching role', and spent only 1.3 per cent of her time in teaching. She undertook all the activities associated with that role. Although the sister was frequently involved with learners during basic and technical activities she rarely taught them and the job teaching she did centred on the transmission of brief instructions on how to do a job.

She initiated teaching primarily on behalf of very junior learners and allowed learners to study when the work was done.

The Learning Environments on Six Wards

During observations it became increasingly clear that the ward environment on Charlotte differed substantially from that of other wards. The strong impression was formed that this was a 'good' ward learning environment, but how were the characteristics to be defined? What were the features that set this ward apart?

Whilst research is in progress it is not always possible to predict which issues are critical, but an open mind and accurate recording of events which provide insight into ward activities, means that qualitative data is available at the analytical stage of the research to assist in the interpretation of quantitative data. It was possible to describe the learning environments on each of the six wards and to highlight the critical factors which turned a working environment into a learning environment, by drawing on data from a variety of sources - including field notes.

The perceptual data from learners in Stage One identified three wards as having 'good' learning environments, in so far as learners who had worked on those wards (Charlotte, Neville and Heaton) felt that they had learnt a lot in relation to what they felt there was to learn. In Chapter 7 a good ward learning environment was seen as 'one in which the needs of learners were met' and the characteristics were described. It is necessary, at this point, to recall that the availability of trained staff to learners, and good communication between the two groups were characteristics of the ideal learning environment which was constructed from learners' comments. Learners in Stage One had expectations that trained members of staff would teach and when commenting on factors that were 'good for learning' named trained nurses as teachers

rather than other learners (pp. 96 - 7). Learners in the second stage of the research also expected trained nurses to teach, and when their expectations were not met, expressed dissatisfaction.

It has been demonstrated in this chapter that the way the sister on Charlotte fulfilled her role was unique, but when the characteristics of the sisters were juxtaposed against the estimates of teaching and learning that occurred on the wards, the quantity of teaching and learning on the two surgical wards did not appear to differ. (Table 62). (But there may have been differences in quality - this was not measured). The perception of learners towards basic and technical activities was also similar on the two wards. However, on Charlotte, the teachers were the trained rather than the untrained. The crucial difference between the learning environments on the two surgical wards turned on the availability of the trained staff to the learners and on the communication of information and knowledge in the wards; on Charlotte ward the trained staff were readily available and communication was such that learners experienced no uncertainty and felt part of a team. Learners on Charlotte felt that their needs were satisfied whilst their peers in Elizabeth did not. Table 62 shows that there were only two wards on which it was estimated that the learners received more teaching from the trained rather than the untrained staff - Charlotte and Neville (and this may well have affected the quality of teaching). There were sufficient data from Charlotte ward to conclude that trained staff were available as a direct result of the sister's intervention. Data from Neville ward were less conclusive, but it will be argued that the sister's democratic style of leadership left room for negotiation; learners were, therefore, able to define their own needs and take some action to ensure that they were met. In short, democracy was 'good for learning'.

TABLE 62

Teaching and learning on wards managed by sisters with different styles of leadership, orientation and teaching roles.

	Charlotte F.Surg.	Elizabeth F.Surg.	Neville M.Med.	Irena F.Med.	Heaton M.Ortho.	Naomi F.Orth
Rating	High	Low	High	Low	High	Low
Style of leadership	Democratic	Laissez-faire	Democratic	Autocratic	Autocratic	Autocratic
Orientation	Patient	Doctor	Doctor	Doctor	Admin.	Patient
Teaching role	Active	Passively inclined	Passively inclined	Passive	Actively inclined	Passively incline
Estimated time spent by learners in teaching situations with trained staff	18.0%	10.5%	20.7%	5.5%	6.9%	8.6%
Estimated time spent by learners in teaching situations with untrained staff	5.7%	10.3%	11.6%	19.1%	30.0%	3.0%
Total estimated time spent by learners in teaching situations	23.7%	20.8%	32.3%	24.6%	36.9%	11.6%
n= Basic activities felt to be important for education	35	31	33	47	48	63
	62.9%	58.1%	57.6%	21.3%	29.2%	41.3%
n= Technical activities felt to be important for education	40	45	41	38	24	24
	92.5%	82.2%	87.8%	71.1%	91.7%	79.2%

Before discussing the learning environments on individual wards, it should be pointed out that the availability of trained staff to learners was not related to the ratio of learners to trained nurses. Table 63 shows that in the mornings, learners on the three wards with the most favourable learner/trained nurse ratios spent the most time with trained nurses. (Charlotte, Neville and Heaton) (SROCT 0.771. Not significant at 0.5 per cent). In the afternoons there was no relationship and learners on Heaton, which had the most favourable ratio of learners/trained nurses, spent the least time with trained nurses (SROCT-0.1). However, Naomi had the most unfavourable ratio of learners to one trained nurse mornings and afternoons, and although the sister and trained nurses spent the most time with learners in the mornings, the ward was ranked fifth for the time learners spent with the trained. In the afternoons, the sister and trained nurses spent the most time with learners and despite the unfavourable ratio, the ward was ranked third for the time learners spent with the trained.

Charlotte Ward - a good ward learning environment.

Charlotte ward (female surgical) was the most highly rated ward in the first stage of the research and it was clear that the way the sister managed the ward and balanced the needs of one group against another, created an environment in which the needs of learners could be satisfied - she made a conscious effort to make teaching a reality.

The sister was a democratic leader, patient orientated and actively accepted a teaching role. The sister operated a system which was anti-hierarchical in the sense that trained and learner nurses worked together in all types of work - the sister converted her ideology of teamwork into a reality.

"The staff nurse or a senior student work with a junior all along. They work as a team - there is no demarcation of work for seniors and juniors..... New nurses are told what I expect of patient care and treatment. We're all here to nurse patients however senior or junior."

Activity sampling confirmed that the trained nurses worked with junior and senior learners in all types of work including repetitive work such as bed-baths and getting patients up as well as technical work such as drugs and dressings. "There's usually a junior and senior together", said a learner found doing a bed-bath with an SEN. The trained nurses were available to the learners but learners were also observable to the trained who exert control. A staff nurse taking a first year nurse to give an injection to an ill, emaciated patient discovered that two nurses had failed to give some basic care. She rebuked the nurses but took the junior student to change the bed.

The sister was patient orientated and concentrated on the needs of patients rather than diseases. The sister did not give as much direct care as the other patient orientated sister on Naomi ward, but she was constantly in and out of the ward and, therefore, in the view of the nurses, and in a position to give advice which related to patient's needs. "We were told specifically to alter the back rest to see if she can breathe better."

But the sister's democratic style of leadership meant that some attempt was made to satisfy the needs of all groups. When a consultant's round was in progress she asked the patients to talk more quietly, but consultants' needs did not dominate her activities. When she was supervising a learner who was doing a dressing, she did not leave the patient or learner to accompany the consultant on a round. The staff

nurse went to assist the consultant who made no objection. "Forward men", he said, saluting the staff nurse, as they proceeded into the ward.

When a theatre porter was left standing in the centre of the ward, the sister called out to nurses on his behalf, "Nurses there's a porter in the ward waiting for assistance - please don't ignore him".. But perhaps the most important aspect of the sister's style of leadership and organisation was the way that both patients and learners were able to enter into negotiations. That is not to say that no needs were defined for them by the ward sister, but their opinions were invited and taken into consideration. The sister was observed attending to some needs 'out of routine' - giving a drink to an old lady who had missed coffee whilst at X-ray, and wheeling an 80 year old lady in her bed to see her husband who was in another ward. The third year student accompanying her expressed her approval, "Sister asked me to help. The patient wanted to see her husband..... It was a good idea to let her go. She was very pleased to see her husband."

Learners were aware of the sister's wishes regarding patient care. "Sister stresses the importance of total patient care", explained a third year student after she had received a short unscheduled report. Frequent and comprehensive communication between the sisters and all members of the ward staff enabled all learners on the ward to accept some responsibility for ward activities within the framework laid down by the ward sister. Sisters on all the wards, except Elizabeth gave routine reports, but in addition to these, the sister on Charlotte gave short reports when additional information needed to be relayed. It was this extra communication which produced the feeling of belonging to a team. A third year student in her second week on the ward said, after being present at one of these short report sessions: "Every morning we have a report - this was an extra one - we seldom have it

on other wards. It's very interesting because it involves the whole team. You know what is going on. You feel like a team. I think this should be done on all wards."

Learners regularly attended the consultant's rounds and were taught by one consultant in particular, but they did not accompany the Registrar. However, after one of his rounds was completed, the sister called the nurses together to go over what had occurred. A first year student indicated that they did not usually have a report at that time, adding "We usually get two reports a day. It's important to keep up to date with who needs what." The nurses were also called together to discuss a new method of taking and recording temperatures, on which the sister had been asked to give an opinion.

Good communication was the cornerstone of the sister's style of leadership, which cemented the team. Information was freely available and enabled the sister to give learners some responsibility for the order of work. Their actions were not rule-governed. The way she organised the work was flexible to conditions - there was an element of task allocation and sometimes she allocated patients to groups of nurses, but generally teams of junior and senior nurses did the work according to the needs of patients and the availability of workers. Only one learner referred to 'time' in relation to a routine activity. Comments referring to 'routine activities' conveyed the element of flexibility. "I just did it". "I was available". "I volunteered to take over." A third year student volunteered to take an elderly patient to theatre. The sister acknowledged the offer and as she put the patient on the trolley said "Alright my love? Nurse.... will hold your hand..... Let's wipe your poorly eye." Afterwards the learner explained, "I asked sister if she would like me to go because the patient is old and poorly."

TABLE 63

Availability of sister and trained nurses to learners on six wards. (Data source - 10 minute activity sampling)

Morning 9 a.m. - 12 noon

		Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heaton M.Orth
Time spent by sister with learners	N=	90 13.3%	90 18.9%	90 8.9%	90 21.1%	90 25.6%	90 14.4%
Time spent by permanent trained nurses (excl. sister) with learners	N=	126 27.8%	54 26.0%	54 24.1%	126 32.5%	18 44.4%	126 28.6%
Time spent by learners with all trained nurses	N=	306 17.3%	306 14.7%	330 10.6% (3.3*)	253 26.1%	288 10.8%	188 23.4%

Afternoon 2 p.m. - 4 p.m.

		Neville M.Med.	Irena F.Med.	Elizabeth F.Surg.	Charlotte F.Surg.	Naomi F.Orth.	Heaton M.Orth.
Time spent by sister with learners	N=	52 13.5%	60 13.3%	60 6.7%	53 28.3%	56 23.2%	49 0
Time spent by permanent trained nurses (excl. sister) with learners	N=	117 37.6%	78 20.5%	60 23.3%	118 32.2%	29 48.3%	80 11.3%
Time spent by learners with all trained nurses	N=	285 35.1% (10.2*)	316 13.6%	324 15.1% (3.4*)	247 24.4%	268 16.8%	205 3.4%

* Clinical Teacher sole trained nurse present.

Learners at all stages of training were in the company of trained nurses for approximately a quarter of their time in the mornings and a third of their time in the afternoons, and spent just over 40 per cent of their time on their own. (Table 63). The sister and staff nurses were often overheard correcting the learners. One learner appeared to be experiencing some difficulty and was heard to say, "It's not my day to-day". The staff nurse gave advice, "You find it difficult to twist it..... Use the other gauze on top of the drain. You don't want a gamgee pad over the stitches, you want it over the drain." This teaching and close supervision was appreciated by the student, "She criticised me and instructed me as I went along. It was helpful." There were many instances to show that this was not an unusual occurrence on this ward.

Evidence that the needs of new learners were met came to light when a student volunteered the information, "I started on Saturday. They were very good, I wasn't left alone. I worked with two nurses this morning." Because of the sister's active teaching role, many of the learners' needs were met by the sister.

The sister initiated teaching sessions by learners and these took priority over other duties. On one occasion she was 'acting up' (i.e. carrying out administrative duties normally done by a nursing officer) but she listened to the learners who were teaching, before delegating the supervision to a junior sister. However, the needs of learners were set against those of the patients. During the consultant's teaching round, some account was taken of the patient's feelings, for learners and doctors remained outside the screens whilst an intimate examination was carried out.

Learners negotiated their way into situations which they felt would satisfy their needs - often at the sister's invitation. But when more than one learner wanted to do a particular activity a democratic

decision was reached. Sister asked about the dressings. "We both wanted to do them, but I had done them quite often so I stood down for Nurse....."

The sister on Charlotte seemed to be a classic example of the democratic leader described by White and Lippitt (1972). Her philosophy of 'teamwork' gave rise to an anti-hierarchical system which seemed to satisfy the needs of both junior and senior learners. Learners appeared to be contented. In all the five mornings and afternoons, only one mildly critical comment was noted when a learner felt that it would be better to have work assigned in a work book. Learners expressed satisfaction about patient care and one student compared it favourably with the care given on another surgical ward. The order on this ward was a 'negotiated order' and it is suggested that control was effective because the learners, who were also the workers, were observable to the trained nurses.

Elizabeth Ward.

In the first stage of the research the learners on Elizabeth ward (female surgical and gynaecological) felt that they did not learn as much as there was to learn on the ward, and frequently commented on the exceptionally high workload on the ward. During observations the workload per nurse per hour was found to be the highest in the mornings and the second highest in the afternoons (Chapter 10), and learners who had worked on other wards described it as the busiest they had worked on. A senior nurse administrator confirmed that it was busy with "so many operations" and a theatre porter who could find no nurse to assist him with a patient said to the researcher, "This ward is the busiest in the hospital. It's terrible.... it's bad all the time. You'd expect it wouldn't you with surgery and 'gynae' together?". Plans had, in fact, been set in motion to separate the gynaecology and surgery specialities which many people in the hospital felt added to the difficulties in the ward.

The heavy workload dominated all ward activities - the sister has been described as 'laissez-faire' (the reader is reminded that this refers to one type of normal leadership), and there is reason to argue that this style of leadership may have developed because of the relentless pressures which had been a feature of the ward for many years. What the sister did, therefore, should be viewed in the knowledge that the workload was high and the sister was observed cutting short her lunch break in order to carry out her own personal load.

The sister characteristics which were determined on what the sister did as opposed to what she would like to have done, were laissez-faire leadership, orientation towards doctors and a passively inclined teaching role. Once the sister had prescribed patient care in a book, the learners made the decision as to who would do the work, but there was some evidence that when the staff nurse or Enrolled nurses were on duty, unlike the sister they did allocate work and assign partners.

Apart from the heavy workload, the prominent features of the learning environment on Elizabeth were the poor communication due to infrequent reports, and the extent to which the permanent trained nurses were unavailable. A number of writers have suggested that lack of information causes uncertainty and leads to anxiety in patients. (Cartwright 1964, Waitzkin and Stoekle 1976, Hayward 1975). On Elizabeth ward it seemed that the sister's style of leadership, which gave communication of information low priority, created uncertainty which caused tensions amongst learners.

On most wards, there was a set time for reports - first thing in the morning and during the lunch break after the nurses who were working late came on duty. Nurses on Elizabeth ward had a short report in the morning but rarely had a report at mid-day, except sometimes when the staff nurse was on duty. The only report that was observed during observations was when a second year student was doing her ward management assessment; a statutory requirement.(But there was one occasion when the sister, having instructed the learners to go to await a report, did not give it because she was completing patient dependency forms for the research). However, on days when research was not in progress, no report was given, and this was described by learners as 'usual' and confirmed by a first year student on Naomi, who had recently worked on Elizabeth, "You were lucky to get a report. Sometimes you didn't get one for two days." Learners required information about the patients' diagnoses for this gave them a paradigm for work. "We have had seven new patients to-day and one day case, who has been and gone without us knowing her history - and no report," remarked a third year student. And another learner pointed to the problems caused by a high turnover of patients. "It's wrong if we don't have a report, especially after two days off - all the patients have changed." Some days later, the learners resolved their anxieties by going to the sister to request a report, which was then given.

Difficulties due to poor communication seemed to be exacerbated by the way work was organised on the concept of 'total patient care' in which those doing the work did all tasks that were needed for one patient at the same time, as opposed to a system of task allocation. Observation on other wards confirmed that with the latter system those doing the work could proceed with a minimum of communication doing the same type of task for each patient on a list, and as there was usually a temporal

element in the system, nurses also knew the order of tasks. On Elizabeth ward learners had to order the work, but the Registered Nurses, who knew what was going on, did not usually work with the learners doing the 'total patient care', for most of the patients, as they did on Charlotte. They spent half their time alone, and when they did work with learners it was usually to do technical work such as drugs, injections or taking patients to theatre - jobs that were assigned to them through national or hospital policies. Learners, especially senior students, therefore had the responsibility for seeing that the care was done without the information which they felt was necessary for the fulfilment of their 'worker' role, and this created anxiety. But despite difficulties they preferred 'total patient care' because they felt that they knew more about individual patients.

It seemed that under laissez-faire leadership in which the sister did not intervene to control events, the trained nurses reverted to a traditional model of nursing, in which they did the high status activities and associated with their peers in the hierarchy, particularly in the more quiet afternoons. Although the sister said that she told nurses who were new to the ward, to ask questions and not to be afraid to come into the office, it was found during observations that learners would not go into the office when the sister was in there with other trained nurses. Learners confirmed that they had been told that they could read notes and study, and they were observed doing this if the ward was quiet, but they would not disturb the trained nurses to fetch notes if the office door was closed, and commented "no one seems to bother."

Learners felt that their needs as 'workers' were not met, and there were also comments - volunteered spontaneously, which showed that they felt that their learning needs were not met. A pupil who had

recently arrived to work on the ward, explained that she had been left to work alone on her third day on the ward. For the first two days an Enrolled Nurse had arranged for her to work with someone, but she was not on duty on the third day. "I did not know what patients needed and had to keep disturbing other nurses to ask what needed doing".

In the mornings, the learners on Elizabeth spent 10.6 per cent of their time with trained nurses compared to 26.1 per cent by the learners on Charlotte. (Table 63). Second year learners spent only 3.2 per cent of their time with the trained (N = 126) so had little opportunity to watch them at work or to have their own work assessed. The clinical teacher who visited the ward spent most of her time with first year learners but was impeded by the work pressures. "You can't just get on with one job - the nurses keep darting about from one job to another." The heavy workload limited what the junior learners could learn. A pupil on her first ward spent two thirds of her time in the mornings alone and was observed fulfilling a 'worker' role repeating work in which she felt fully competent. "I often see things going on that I would like to watch but I'm usually too busy. Sister usually asks if I've seen things but if I've watched once there isn't usually an opportunity to watch again. If I ask I am allowed to - I want to see a drain taken out this afternoon." (She was later seen watching this). The junior nurses felt that the sister was usually too busy to teach them, but she was observed teaching on the rare occasions she worked with them, suggesting that if freed from heavy work demands she would do more teaching. However, no action was taken to turn the 'worker' role of senior students into a 'learner' role.

It was clear that the sister had little time for teaching, but she did not delegate responsibility for teaching to other trained nurses. Learners expected trained nurses on the ward to give lectures but in seven weeks none had been given. "You feel lost when you first come

because you're used to having teaching." Since teaching was not built into the routine learners initiated the teaching themselves and negotiated with senior learners to teach. Some discussions which often centred on assessments and patients in the ward were observed. What was interesting on this and other wards where the trained nurses did not teach, was the way the learners assumed responsibility for getting their own needs, and those of other learners, satisfied.

One key event confirmed the high priority accorded doctors and the low priority given to the dissemination of information except in 'ideal' circumstances. The 'ideal' circumstances were observable when Student Nurse Hitchen (pseudonym), a second year student, took her ward management assessment. As the researcher arrived on the ward at 12 noon to prepare for the afternoon observations, Student Hitchen was encountered writing the Kardex in the corridor. The office was temporarily 'out of bounds' as the sister was in there with a consultant and four doctors following a 'round'. Despite being officially 'in charge' Nurse Hitchin did not go on the round.

When the doctors vacated the office Student Hitchen went in to complete the Kardex in preparation for the report which was required by the assessor. At 12.30 p.m. Staff Nurse Harris - a temporary nurse from the 'pool' arrived on duty and asked to see the Kardex. She was ignored. She made the request again, explaining: that she had been off-duty for two days and did not know anyone - but without success. "She's doing her assessment", explained the sister. Later Nurse Hitchen gave her report and passed her assessment. She commented on the 'unreality' of the situation. "I'm sure sister knows more about my management ability than the assessor coming for the exam. All the patients were on their best behaviour because they had learnt I was doing an assessment and patients going home told sister how good I'd been to them - a totally unreal situation. Also,

I wasn't in the office first thing because three patients who had had 'terminations' were in tears and I spent half an hour going from one to the other - not a normal situation. You get so nervous and worked up about it." What emerged from this conversation was that Nurse Hitchen had put the emotional needs of the patients before her own need to establish administrative order in the office. Whether this occurred because of the personal attributes of Nurse Hitchen or because of the way learners on this ward were socialised to perceive the needs of the individual, cannot be known. The sister operated a 'total patient care' system and the reader is reminded that learners on this ward made more comments to show that they were aware of patients as individuals. (pp. 232 - 4)

Learners on this ward did not display anxiety over their involvement with patients. Anxiety may have been expected because devices described by Menzies (1960) to 'depersonalise' the patient, such as task assignment and rigid routine, were not observed on this ward and learners were allowed to use their discretion and had to think about what they were doing rather than follow rules. The tensions that were observed amongst the learners appeared to be wholly related to the heavy workload, poor communication and to the feeling that their learning needs were not being met by trained nurses rather than to the absence of devices to depersonalise the patient.

It seemed that the trained nurses, who it should be remembered were permanently assigned to the ward, escaped from some of the anxieties caused by the heavy workload, by placing responsibility for the rump of the work on to the learners. During slack periods they withdrew to the office. The sister used these periods to sort out and read the patients' notes and to reflect on the care she was giving.

"After five or six days of being really busy you wonder whether you're missing anything. You can't find time to get to know the patients and feel you should know them better. Not that I know of anything," she hastened to add, "But you wonder". Data from all sources confirmed that this ward was continually busy. When the ward was unusually quiet the sister did not use the time to teach the learners. Is it reasonable to expect that she should?

The sister on Elizabeth ward took little action to make teaching on this ward a reality and the learners did not feel that their needs were satisfied.

Neville Ward

Neville ward (male medical) had the lowest workload per nurse per hour (Chapter 10), and there were occasions when there appeared to be no work for the nurses to do mid-way through the normally busy morning periods. The sister said that nurses were "rarely rushed off their feet" and when the researcher asked one learner whether she had time to be interviewed, adding " Or are you rushed?", the learner replied, "Rushed? Not on here." The highest workload per nurse per hour in the mornings and afternoons on Neville was lower than any on Heaton, Naomi or Elizabeth, but it seemed that similar numbers of workers were allocated to the ward, whatever the workload.

The sister was democratic, doctor orientated and fulfilled a passively inclined teaching role. The ward was highly rated by learners in the first stage, and despite the sister's passively inclined teaching role, the teaching and learning that was found on this ward compared favourably with other wards. It is suggested that the sister's democratic style of leadership in which she invited learners to participate in activities rather than commanded left the learners room to negotiate or initiate their own learning situations. This was particularly noticeable during doctors' rounds.

At interview the sister said that learners did not go on rounds and she did not feel they benefited unless they were "really senior", because they could be "very technical and mean nothing". Nevertheless, as some rounds progressed learners gradually joined in, and it was clear from the learners' comments that the sister allowed them to join in provided there were "not too many" and the ward was "alright". Usually the learners stayed at theback of the group but on one occasion the consultant acknowledged their presence and taught them, showed X-rays and, on one occasion, asked if they wanted to feel 'surgical emphysema' which one patient had. (Air which had leaked into tissues around the neck could be felt under gentle pressure). A third year student in her fourth week on the ward, was also observed joining the round of a consultant who was said to object to learners going on his round. She said later, "I wanted to learn more about the patients and joined in. It's the first time on his round."

Although the sister spent a fifth of her time on doctors' rounds the needs of doctors were balanced against those of others - including learners and patients. There was no noticeable increase in activity prior to rounds and learners continued with whatever work they were doing. Immediately prior to one round a third year student (who had recently heard that she had failed her 'finals') was observed cutting an old man's hair and manicuring his nails. He had asked the sister if anyone could do it for him and the nurse volunteered because she "used to cut (her) brother's hair". She explained, "It was important for his morale. He must be feeling better to ask to have it done." As the consultant appeared in the corridor, the nurses were admiring the haircut and talking to the patient. And when the round began the sister and nurses exchanged smiles. There was no tension.

The social distance between the sister and trained staff, and learners and patients was such that they would joke together, and some trained nurses joined the learners when the work was done. Although the sister did not spend much time working with the learners she arranged for trained nurses or senior students to work with juniors so that they did bed-baths as well as technical work. This was 'routine'. A student on another ward described the system on Neville as 'total patient care' but an element of task allocation was observed. A third year student who had been on the ward for six weeks said, "We have a nursing Kardex so know the routine from that. We just get on with the work ourselves but they like to have a junior and senior working together." This was not always observed, however. There was one occasion when two trained nurses and two junior learners returned from coffee - one trained nurse went to do dressings, another did 'observations' and the two juniors fetched the bath trolley. Activity sampling showed that this hierarchical allocation of jobs was less evident than on the other medical ward, Irena, and the conclusion was reached that the system was anti-hierarchical.

There were data to show that the sister and other trained nurses attended to the needs of both junior and senior learners - and also to those of a school boy from a local school. He was introduced to the researcher by the sister who talked about his personal background, saying "He has been here before and wants to go into the Royal Navy." He spent most of his time with a third year student and when the work was done joined the group of trained and learner nurses in conversation.

The sister felt that too many third year students had been allocated to the ward at one time, but initiated teaching situations for the senior as well as junior students. Two third year students stayed in the X-ray department to watch specialist procedures. "Sister

asked if we had seen it - we both hadn't so went down. As we are third years we were asked first." Both students were appreciative of the teaching they had received whilst they were there and it was evident from data collected during other activities that the third year students on this ward felt that they were 'learners' as well as 'workers' - over 60 per cent of 16 basic activities and 80 per cent of 23 technical activities were felt to be important for the learner's education. Comparative percentages for third year learners on Irena were 0 per cent of 18 basic activities and 6 out of 15 technical activities (40 per cent).

Although the clinical teacher was not observed in many teaching situations on this ward, she fulfilled what appeared to be a key role as an organiser of teaching, since she arranged for doctors to give lectures about patients in the ward, and after they had been given, discussed the teaching with learners to ensure that they had understood what had been said - learners felt that this was important. Whilst the senior students felt that they benefited from the informal, unstructured discussions which were observed in the afternoons, the junior learners were less certain of their value. One complained of being 'bored' because there was little to do. She clearly preferred the formal teaching given by doctors or members of the trained staff. "The junior sister once sat down and explained some things to us. That was good." This was the only critical comment made of the ward.

White and Lippitt (1972) found that democracy was characterised by more 'group mindedness' and friendliness. Trained nurses on Neville were frequently observed with groups of learners and the way the school boy was welcomed into the group by the sister and other members of the ward staff tended to confirm the 'friendliness' that was subjectively observed. Although the sister on Neville was not actively involved in teaching, her democratic style of leadership enabled teaching to become a reality.

Irena Ward

The sister on Irena ward (female medical) was autocratic, doctor orientated and fulfilled a passive teaching role. The ward was of particular interest because the order, following a traditional model of nursing, was dominated by hierarchy and routine. The learners in the first stage did not rate this ward very highly for teaching and learning. There were frequent comments that trained nurses on the ward did little teaching and the findings of the observation stage tended to confirm this. This was the only one of the six wards where the learners were more likely to be taught when they were with other learners than with trained nurses assigned to the ward. The sister on this ward made little conscious effort to make teaching a reality and her style of leadership and orientation inhibited learning.

The sister on Irena prescribed work in a work book under a system of 'task allocation' and nurses were often overheard referring to 'aspirations', 'baths', 'backs', 'teeth', and so on. Tasks were distributed on a hierarchical basis and it was rare to observe a staff nurse assisting with baths, bed-baths or pressure areas which formed the bulk of the morning work. Basic tasks which were done at particular times made up the routine. When asked why they were doing a specific basic activity, learners tended to respond that 'it was routine' - they followed the rules.

"They're all weighed every Tuesday. Routine thing to-day."

"Always do pressure area round at this time - just got the trolley and did it."

"Ward routine - do it every morning with the teeth - just the done thing."

"Given a list of baths and then do them."

"It's routine for Friday."

And when a learner responded, on one occasion, "We work together ourselves", the hierarchical pairing was readily apparent - Sister with staff nurse; third year student with second year pupil; and first year student with more junior second year pupil. Often, when third year students were found doing basic tasks, they indicated that they would normally be doing other work such as 'admissions' or 'injections'. Nevertheless, because there were many basic tasks to be done, they were observed doing them - "too often", as one senior student put it. But, they neither saw, heard or felt that they were doing anything that was important for their education during these basic activities. Basic work was observed to be of low status and was delegated down the hierarchy. One second year student found in the sluice testing urines said, "Staff nurse asked me to do them as soon as I came back from coffee. I always seem to get lumbered with urines and bed-pans because I always seem to be around."

The sister and staff nurses were observed doing some basic work with learners, but it was usually at peak work periods prior to 9.30 a.m. and immediately after 3 p.m. when patients were returned to bed. Although the learners' work was reduced to a series of tasks which were linked to specific times, it was interesting to observe that the sister and one of the staff nurses gave and prescribed occasional items of care 'out of routine' such as pushing a foot rest under a patient's leg when it was slipping and, on observing a cup of cold tea by a patients bed, requesting bread and marmalade and a glass of milk for the patient who had difficulty in communicating because she had had a 'stroke'. The few teaching encounters involving the sister were brief exchanges directly concerning a patient, but they demonstrated her personal concern. A second year pupil found supporting a patient on a bed-pan said, "Sister told me to stay with her because she gets giddy. I can't leave her." (The patient had earlier fallen out of bed).

However, despite the sister's concern for her patients, she did little teaching and no 'passive' teaching was reported by the learners who worked with her, and their comments suggested that they were doing work - often in haste. A third year student assisting the sister with a drug round explained that the practice was important, but saw or heard nothing. "I didn't have time. We gave them out before the doctor's round." And on another occasion the learner involved said, "The round is soon so we do them slightly earlier before the doctors come."

The sister spent long periods preparing for the rounds, and when the rounds were in progress and during coffee afterwards, everyone was expected to keep their distance. The atmosphere was noticeably tense before and during the rounds. A student on her first ward was rebuked for not starting baths sooner, "It's a bit difficult with doctors coming round, but I hear that other wards don't treat doctors in such awe". A senior student, eight weeks on the ward, independently gave her view of events, "We're busy because sister is on. She likes everything done before the round - usually we spread work out as we can do it." A student was observed waiting to wheel a dressing trolley through the ward but she would not do it whilst the round was in progress. After only three weeks experience of the ward she was able to comment knowingly about the consultant, "He won't speak to anyone less than a third year."

The needs of learners and patients came below those of doctors. During one round a student on her first ward was observed giving encouragement to a patient whilst she tried to walk. "Frame, feet, Super. ", she advised, and then the session was brought to a close when another nurse signalled to her to be quiet.

Learners were excluded from doctors' rounds, but when a round was cancelled one afternoon, neither the sister nor the two staff nurses who were on duty gave their time to learners, although presumably 'time' would have been available, since the trained nurses agreed that it would normally have taken all their time from 2 - 5 o'clock. One described it as a 'dead afternoon'.

The main concessions to learners' needs centred on the teaching of predominantly technical tasks and the provision of an opportunity to sit and study in the afternoon, when the work was done. But it is arguable that this learning opportunity had been imposed from outside by the General Nursing Council through the ending of 'split duty working' and the request that learners should not engage in 'non-nursing' duties. The problem created by a surfeit of workers with no work to do could be solved by allowing learners to study on their own. This allowed permanent staff freedom to pursue their own activities. No member of the trained staff assumed a role of teacher and it was rare for them to join learners in discussions. But learners who were discussing together whilst trained staff were in the office explained, "We just decided we ought to talk about something relevant because we can't get into the office to get books." Thus trained staff were unavailable and learners spent 13.6 per cent of their time in the afternoons (N= 316) with trained nurses compared to 35.1 per cent spent by those on Neville (N= 285) (Table 63).

Senior learners undertook a teaching role but it seemed that what they did satisfied their own needs rather than those of more junior learners. Subjects were disease rather than patient centred, and focused towards examinations. A student on her first ward said, "The others are a bit more advanced than me - it's a bit above me." Another third year student who did not join in discussions remarked, "I didn't do any work because I couldn't concentrate. I can't work

well unless it's quiet". However, some learners felt that the discussions led by the senior students were helpful.

Responsibility for teaching during technical procedures was given to senior students by the sister, and both they and the juniors involved felt that they benefit ed from such situations. But teaching activities were not expected to interfere with the 'worker' role of the senior students. One student was asked to teach another learner but was rebuked for allowing an intravenous infusion to run low, despite the fact that at the time there were three trained nurses in the ward. "I can't do everything", she commented later.

The order on Irena ward emphasised work rather than learning, and learners had to follow rules more than learners on other wards. They were able to negotiate some of their needs, but only within boundaries which were clearly defined by the sister. The needs of junior learners were met by senior students insofar as technical activities were concerned, but no provision appeared to have been made to satisfy the needs of the senior students. They were not released from their working role to attend doctors' rounds or lectures or other situations which they felt could have helped them.

The sister defined the needs of patients and in her own terms saw that they were satisfied by incorporating certain items of care, such as 'teeth' - which some learners observed were often forgotten on other wards - into the routine. The learners on this ward seemed more intent on getting the work completed according to a timetable laid down by the sister than on considering how the care they gave contributed to their education. By following rules they did much of their work automatically, without thinking about it. The conclusion was reached that teaching and learning were inhibited by the routine task allocation, and the high priority accorded to doctors. The sister made no conscious effort to make teaching a reality.

Heaton Ward

Heaton ward (male orthopaedic) had a reputation for being highly organised and a staff nurse from another ward, on hearing that observations were being conducted there said, "I bet you notice the difference - absolute efficiency". The ward was highly rated by learners in the first stage, but when data on teaching and learning were analysed, it was surprising to find, that contrary to expectations which were based on data from the first stage, the teaching and learning during certain types of activity, was low. The conclusion was reached that the sister's 'efficient organisation' of the ward gave learners so little discretion that they were able to do much of their work without thinking about it, with the consequence that they were not prepared for learning.

The sister was autocratic, administration orientated and fulfilled an actively inclined teaching role. It was her explicit policy not to give junior learners too much responsibility too soon and it should be said that, in the achievement of this objective, she was singularly successful. Learners were able to perform much of their work automatically because precise orders were communicated via the routine. The work was found to be highly routinised. A weekly workbook was kept and some work was prescribed in a book used for recording temperatures. When asked why they were doing a particular job, learners' responses showed that a very high percentage of basic activities were assigned through 'general instructions' - 51.1 per cent via the routine laid down by the sister. (Table 55).

Learners exhibited no uncertainty for they all knew what was to be done. "It's just routine - you pick it up on the first day. You know what you have to do," said one student. "It's a set pattern and you fall into it," said another. Each morning beds were stripped and sheets and blankets left neatly folded, in what appeared to be

identical fashion, at the foot of the bed, as each patient was washed. Learners explained the routine. "It's routine to do beds after baths." As the day progressed the order of events emerged.

"We always do backs at this time."

"It's usually done at this time. We're working late, therefore, we don't do the backs because we will have to do them later on. So we do the bottles and get patients back to bed."

"Routine. Back to bed at 3.30 p.m. The old men go back after visitors."

There was task allocation of work but the Registered and Enrolled nurses assisted learners with bed-baths, and other basic activities. The sister joined learners in technical activities and her wish that trained nurses took learners on drug rounds was incorporated into the routine. "Sister likes two nurses on the round - a junior and a senior." Other 'likes' were also taken into account, such as nurses going on doctors' rounds ("Sister likes us all to go on it"), and studying in the afternoon ("Sister likes us to do this - it's interesting for us", and "We know sister doesn't mind").

Immediately prior to the doctors' rounds, all members of the ward staff were participants in ensuring that everything was ready; from the sister who waited with the notes and X-rays, the learners and auxiliaries who attended the patients, the physiotherapist who altered her routine, to the ward domestic who anxiously cleaned the floor muttering to herself about the coffee preparations. When the consultants and their retinue arrived, everyone except the domestic accompanied them. Learners were unanimous that it was important to attend, for teaching and the communication of information.

"It's important to know what's going on."

"To see the X-rays and the plates - we don't often have a chance to see the plates."

Trained nurses were available when there was work to do but learners were conscious of being segregated from them during the afternoons. "We're down here and they're up there. On 'A' ward we had discussions on the patients.... but not on here," observed one student. Activity sampling revealed that the sister spent no time with the learners in the afternoon and the other trained nurses spent only 11.3 per cent of their time with them, which was the least of all the wards. (Table 63).

In this well ordered regime, the sister defined the needs of the learners and, on her own terms, satisfied them. But some learners did not feel that their needs were satisfied. "I feel I've missed out on orthopaedics", explained a first year student who had been on the ward for 10 weeks, "I shan't come back here, but I haven't been able to tie the patient care together. I haven't had any lectures on here. It's task orientated - the sameevery day." This learner had, however, been observed in discussions with other learners, but the topics were unrelated to what was occurring on the ward and, on one occasion, seemed to be satisfying the needs of a senior student who was about to sit her 'finals'. She talked and asked questions about 'pericarditis' and 'rheumatic fever'. "My 'finals' are coming up soon so it helps me. Sister approves.... They ask questions. It's mainly revision. This ward compares very well with others. We were going over diseases and nursing patients - mainly medicine. I couldn't teach orthopaedics." After the examination had been taken, the discussions led by the student ceased.

On another afternoon learners were trying to answer a question

that had been received from 'the school'. It concerned 'anaemia', and the junior learners could not understand a book they were reading in order to answer the question. "We have a question to do for the school. Some of the books are hard to understand," said one of the students, and another explained how she would like her learning needs to be satisfied. "I would like to have a junior or a senior sister to give talks - it would be of more benefit". But those with the knowledge did not join them. At the time three trained nurses were on duty but they were in the office and learners did not feel that they were available. "I feel that the qualified staff keep their distance on this ward", said a first year student - "Sister shuts the door of the office, I haven't really spoken to her except when I come on duty." They also voiced the feeling experienced by learners on other wards, that they were unable to look at notes or X-rays when the trained nurses were in the office.

Learners on Heaton who had been present at a lecture given by the sister made favourable comments about it, and it seems that other learners based their expectations that they would be taught, on the experiences of learners who had been involved in teaching sessions. They appeared to be more dissatisfied about the lack of teaching than learners on either Irena or Naomi, which did not have a reputation for teaching.

But the most important finding from Heaton ward was the low percentage of basic activities which were felt to be important for education, coupled with the low percentage of learning opportunities that came to light. Task allocation, a rigid routine comprising basic tasks, and emphasis on techniques, appeared to inhibit learning during routine work.

There were some data to show that the sister on Heaton made some effort to make teaching a reality, but her style of leadership created an environment which inhibited learning and prevented learners from negotiating their own needs.

Naomi Ward

Much of the work that was done on Naomi ward (female orthopaedic) was repetitive basic nursing and learners arriving on the ward based their expectations on the comments which learners who had previously worked on the ward, and other nurses in the hospitals, had made. The work on the ward had been described by one trained nurse as 'hard slog'; a staff nurse on another ward said that working on Naomi was a 'waste of a trained nurse', and another ventured the suggestion that the ward could be discontinued as a training ward because it was 'getting just like a geriatric ward'. Such views could, perhaps, explain the low numbers of trained nurses working on this ward compared to others. There were, therefore, two main points about the work on Naomi; firstly, it was considered to be 'hard work',and secondly, it was not the type of work that learners in training were socialised to believe was important for their education. A junior nurse working on the ward said, "It's hard work but not as bad as I had been led to believe. When I told staff at the other hospital that I was coming here they said, "If you get the worst over, there's only the best to come."

The workload in the morning was second only to that on Elizabeth and the highest in the afternoons, but because of the doctor's strike at the time of the observations it was, according to the sister, "lighter than normal". Learners still referred to it as 'hard work'. Bearing in mind the nature of the work it was, therefore, of interest to find that learners on this ward responded that they were doing something that was important for their education in a higher percentage of basic activities in the sample, compared to their peers on Heaton

(the high rated ward) (Table 62). They noted more about their patients - their social background and their feelings.

The sister on Naomi was autocratic, patient orientated and fulfilled a passive teaching role. In the mornings when most of the work was done she spent 36.7 per cent of her time assisting patients which was a minimum of 15 per cent more than any other sister. Unlike any other sister she spent almost as much time in basic nursing as she did in technical nursing. Data from activity sampling tended to confirm that she did what she said she wanted to do - namely, "I just want to nurse to the best of my ability."

Of her patients she said, "All these old ladies are individuals - they're all dears", and she was constantly in and out of the ward, giving and supervising care . Whilst there was work to be done, and particularly as far as the physical bed-side care was concerned, the sister on Naomi made teaching a reality, despite frequent interruptions. A junior nurse who was working with the sister said, "Sister said what she was doing as she did it. A lot is common sense but it was helpful to have her say what she was doing." She highlighted some of the difficulties which were caused by frequent interruptions. "I work quite often with sister. Sister can tell you more about the conditions than anyone else - often as we work. The disadvantage is that she keeps leaving for the phone, messages, doctors, etc." Since she was in the ward she was able to exert control over other nurses, and patients looked to her for support. As two junior nurses were getting one elderly patient out of bed, the patient told the nurses, "I don't think you two will manage." "We've managed before," replied the student. But the sister arrived to assist the nurses. "You've come to rescue me," cried the patient. When the sister was in the ward, the learners were not allowed to forget that the patients were individuals with feelings, and this may, in part, explain why

learners on this ward noticed more about their patients during basic work than learners on Heaton - particularly learners who had been on the ward for more than seven weeks. When a patient called out in pain the sister went immediately to find out what had happened, and on another occasion, she reminded two learners that "old people are very sensitive to pain."

The permanent trained nurses on Naomi were also 'patient orientated' and although they were fewer in number they spent more time in basic nursing, than trained nurses on other wards. The junior sister said, "I love geriatrics - women's orthopaedics you get a lot of old ladies. I like it on here but it's not everyone's cup of tea." Thus both the sister and the other trained nurses were available to the learners when there was work to be done; and although the sister was heard exhorting the learners to get the work finished, and appeared anxious because the patients were not drinking, the learners did not complain about the close supervision. They welcomed the presence of the sisters in the ward.

The sister wrote a work list, which was a mixture of task and patient allocation - 'theatre cases' were allocated to a special nurse. Nurses working on 'one side' carried out all the basic care needed for a patient and gave the patient a drink. Dressings were postponed until the afternoon. It was not unusual to find nurses saying that they were 'fully competent' in all the basic tasks about which they were asked and that it was not important to be doing it for their education. One first year pupil said that she would have said the same about everything she had done one morning and did not know of anything that was going on in the ward that she would have wanted to do or see. A second year student said the same. The pupil explained, "I prefer surgery. The higher turnover of patients on there. But I like the friendly atmosphere on here. You can ask the sisters anything and I like the way the sisters come on to the ward."

Despite the unpopular nature of the work, five out of eleven learners volunteered the information that they liked working on Naomi. Furthermore, it seemed that the personal interest in the patients which was exhibited by the sisters was reflected in some of the learners. "I like working on here - the old ladies are real characters, said a second year student in her third week. Another student who had almost completed her nine weeks allocation said, "I've enjoyed being on here and want to come back."

Although some care appeared to be given 'routinely' there were other occasions when learners explained how they were trying to satisfy the needs of an individual. "She has come in for bilateral knee replacements - she has painful arthritis. We were trying to get her out without hurting her." One student had learnt by her mistakes and had become more acutely aware of a patient's particular needs. "She kept crossing her leg over and saying she couldn't help it.... If I had noticed this before, she probably wouldn't have fallen."

Patients noticed the different care they were given. When the researcher sat beside a 91 year old patient during a 'lull' one morning, the patient remarked that it was nice to have someone sitting beside her. On being told briefly about the research she described her experiences. "I'm not a coward, but I didn't know I would have to bear so much pain. Some of the nurses are a bit rough. Some are learners, you know. But two of them do it beautifully, and are so gentle and kind."

As far as the sister was concerned, the patients took priority above administration, doctors and learners. A consultant from another speciality said to the sister that he had come to see a patient, "Just tell me where she is - I won't disturb you", and he went unaccompanied to see the patient. On another occasion, a message was given to a student on behalf of the sister, that she should attend to a patient who had newly arrived on the ward. The student was with

a Registrar and did not leave immediately. The sister saw that the patient was not being attended to and went to the student. "I'm with the doctor", the student explained. The sister waved her hand as if to indicate that he did not matter and instructed the nurse to get the patient to bed.

Learners did not go on doctors' rounds. They felt that the ward was too busy. "It's bad enough trying to get the work done." But they felt that it was helpful to go with doctors if an opportunity presented itself. "You get to know straight from the doctor what is to happen - it's much clearer. They will explain," said the student involved in the incident described above. Communication appeared to be sufficiently adequate to allow learners to do their work. They were "always given a good report" and could ask questions but learners were aware of deficiencies. One student knew that a patient was "an osteomore and couldn't be rolled", but wanted to know more. "I will read it up. I know nothing about what she has had done. If I did it wrongly something could go wrong."

It was estimated that the learners on Naomi spent less time in teaching situations than learners on other wards, and this could be explained in part by the heavy workload and ratio of trained staff to learners. But when there was spare time which occurred on only one afternoon, the time was not used for teaching. Furthermore, it was the sister who decided what should be done. The Enrolled nurse told the sister, "There are quite a lot of us on this afternoon. Is there anything special that you want doing?". Having confirmed that there was nothing that needed to be done for patients, the sister replied that "the lotion room or splint room could be tidied." There was a 'routine' for cleaning out lotion cupboards, for a student confirmed that they were done 'every few weeks', but on this ward there was no routine for teaching the nurses once the work was done - lectures and discussions were infrequent occurrences.

It seemed that the problems and conflicts in nurse education were crystallised on Naomi ward. A first year pupil in her second week echoed the comments of learners from previous decades. "I don't really learn much on here - it's backs and bed-pans. We haven't got a chance to read notes or have little lectures as on Charlotte. It's nobody's fault - it's just that kind of ward. It's a friendly little ward and the sisters are nice, but I haven't had time to look at notes since I came on here. The patients' names are all...." At this point she flung her arms into the air to demonstrate her bewilderment. She knew how to do the physical work, but wanted someone to give her understanding.

Since the sister and trained nurses on this ward were 'patient orientated' they worked with the learners doing all types of work. Therefore, when there was work to be done, the system was 'anti-hierarchical'. But the sister's autocratic style of leadership and passively inclined teaching role meant that learners were not involved in discussions to define or negotiate their special learning needs when temporarily freed from their 'worker' role.

Conclusions and summary

Data discussed in this chapter strongly suggest that an ideal ward learning environment is one which has moved away from a traditional model of nursing. Thus the sister is democratic rather than autocratic, patient orientated rather than doctor or administration orientated, and she sees the student or pupil nurses as 'learners' rather than 'workers'. The order moves from one which is geared to getting the work done to one which is geared to learning, for the two orders are not compatible. It is suggested that a traditional model of nursing dominated by hierarchy and routine inhibits teaching and learning, and by implication a good learning environment inhibits work. Unless the sister takes positive action to move away from the traditional model, the environment remains a working environment in which teaching and learning are minimal.

In an environment derived from a traditional model learners do not feel that their needs are satisfied.

Although the sister is unable to control the ward workload, ratio of trained staff to learners or the type of patient in the ward, there are some characteristics which do fall within her control. She is the key figure who has the opportunity to change work into learning for she has the authority vested in the office of ward sister to control the work and the workers.

An ideal learning environment is seen as one in which the needs of the learners are met. The sister is democratic, patient orientated and fulfils an active teaching role by taking positive action to make teaching a reality. Traditional devices to get the work done such as a hierarchical system of task allocation and rigid routine are abandoned in favour of an anti-hierarchical system sustained by an ideology of teamwork in which the trained work with the untrained doing all types of tasks which are allocated under a flexible system which is responsive to the needs of patients, workers and learners. There is frequent and comprehensive communication of information which removes uncertainty and enables all workers and learners to participate in discussions and negotiations, which are key features of the ideal learning environment. (Logically information would also be available to patients, for care is responsive to their needs.)

Thus, the ideal learning environment is characterized by teamwork, negotiation and good communication. There is a team of teachers, and trained nurses are available and approachable. Above all the sister makes a conscious effort to make teaching a reality.

Data in this chapter tend to support the hypothesis "Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality."

CHAPTER FOURTEEN

DISCUSSION AND IMPLICATIONS

The findings of this study can only be generalised to the wards that were studied. Nevertheless, the problems that were identified were similar to those which have been highlighted by others and reported by successive Working Parties and Committees over a period spanning several decades. It is possible that the reader may sense that some of the findings are observable in other wards in other hospitals.

In the past, the delegation of repetitive nursing work - essentially the basic nursing - to learner nurses has been legitimised on two counts - at a policy-making level it has been legitimised on the grounds that learner nurses are able to learn as they work; and at ward level repetitive work has been delegated to junior nurses in the belief that such work is easy to do. The results suggest that the type of work during which teaching and learning takes place is technical rather than basic. It appears that nurses - even junior nurses - find repetitive basic nursing easy to do, they feel fully competent doing the majority of basic tasks and do not feel that the physical performance of such work is important for their education - but recognise that it is important for the patient.

Educationists argue that important pre-conditions to learning are "an expectancy that there will be something to find out", (Bruner 1961 p. 24) and that learning conditions "must be carefully planned before the learning situation is entered into by the student". (Gagné 1970 p. 26) If this is right, in the light of the findings of this research, there seems to be an urgent need for policy-makers and nurse educationists to decide how, or if the performance of routine basic work satisfies the learning needs of the student and pupil nurses doing such work. Howfar does the learners' perception of such work prepare them for discovery? What are they expected to learn? What

do they learn?

It is not the work of the researcher to answer such questions - these are questions for the policy-makers - but the research has uncovered aspects of the ward environment which appear to be inconsistent with learning. It seems that a system which has traditionally developed to get the work done, produces an environment which is the antithesis of a learning environment. For on the one hand, a system of task allocation, in which tasks are allocated to workers according to a place in the hierarchy, takes trained nurses away from the learners who are most in need of help; and on the other, routinisation of work contributes to an automatic job performance, which stifles a spirit of enquiry, and must in some way affect the quality of patient care. If an acceptable quality of care is seen as a goal to which nurse education is logically directed, nurse education cannot be viewed in isolation.

Henderson (1966 p. 42) describes nursing care as follows, "The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible. This part of her work, this part of her function she initiates and controls; of this she is the master." The unique function of the nurse is, therefore, concerned with observing and assessing needs of patients and ensuring that those needs are satisfied. But there is reason to believe that a system of training which follows a disease, task/technique model and is pursued in wards where work is heavily routinised, socialises nurses to overlook the needs of patients occurring 'out of routine' - needs which may be apparent to someone who has not been trained to nurse.

Is it possible that frequent repetition of work may lead to nurses doing work automatically without thinking about it? Is it possible that the performance of work as a matter of routine relieves the nurse of anxiety and responsibility to a point where she can automatically proceed from one patient to another unaware of anything in her environment which is outside the routine? The answer to both questions is, "Yes". Brown (1973) quotes Maire de Biran (1803) "In proportion as habit makes us execute them with more ease and promptitude, it restrains our faculties and hinders them from being extended outside the same circle." In other words, once a task can be performed to the point where it becomes a habit, the performer need not observe the object on which she performs except insofar as is required by the task. A nurse can take the temperature of a patient without thinking about the needs of the whole patient. Unless she awakens her senses, she may see only the mouth, feel the pulse and watch the rise and fall of the chest, counting automatically.

To illustrate this, it is necessary to recall an incident which was observed during the pilot study. A second year student was observed taking the temperature, pulse and respiration recordings of an elderly patient, who was slipping out of her chair. The nurse took the patient's temperature, and having finished the observations, recorded the results, and continued tothe next patient, leaving the patient otherwise unattended. A young girl of similar age, dressed in a white coat, saw the patient's predicament, and called a nurse to help her to lift the patient safely into her chair. Who was this young person who recognised and attended to the patient's needs? A nurse? An auxiliary, doctor, physiotherapist? No. A young volunteer from the local technical college. She had not been trained to nurse.

There is a sense in which the socialisation processes through which nurses pass, divert the learners attention away from the patient. Other writers have observed that needs of patients which fall outside the routine are ignored (McGhee 1961, Bendall 1973) and Lelean (1973) asked whether "nurses were so busy trying to keep up with the routine that anything which interrupted this was regarded as a nuisance?" (p. 110). Under some circumstances even the question "How are you?" becomes a routine question requiring a response of "fine, thank you", for requests for something which is outside the routine, or the 'disease model' for a particular ward, seem not to be heard. Thus it is not only repetition of tasks which inhibit awareness of patient's needs, but the model of nursing which emphasises diseases, techniques and is dominated by the routine.

The results show that the educational needs of learners appeared to be seen by both learners and trained nurses in terms of technical competence and the wards which learners preferred were concerned with cure rather than care. Is nursing a series of technical tasks? McFarlane (1976) sees nursing as "helping, assisting, serving, caring," but says that "this is not the stereotype of the nursing function held by the public or new recruits to nursing. They see the nurse as someone concerned in curing, playing an ancillary role to that of the doctor. The danger is, that the great talent of caring and helping and assisting... may be ... given to others unskilled in the art and science of caring, whilst we become technicians." (p. 190). McFarlane argues that "a great deal of disservice has been done.... by the profession taking over words originally used by Goddard (1953) as categories of quantitative measurement of the work of nurses, i.e. 'basic' and 'technical' and investing them with a qualitative meaning. We imply - 'basic' is easy, 'technical' is difficult. 'Basic' is for junior students, 'technical' for senior students and trained staff", and believes that "the division is an artificial one". (p. 191)

However, it seems that the problems surrounding 'basic' and 'technical' tasks arise from the intrinsic nature of the work and not the label, and were present before Goddard's intervention. The differences are something to do with "cleanness" of functions performed (Hughes 1971 - see earlier discussion pp. 9 - 10) and with the notion that repetitive tasks, which do not involve the handling of technical gadgets, are in reality found to be simple to do insofar as untrained people are able to do them. But, it is difficult to see how the quality of care or degree of difficulty can be assessed, until such time as nurses define nursing skills clearly and teach and assess those skills in every type of situation, including basic nursing. Hitherto, there has been no objective assessment of learning during basic repetitive work, therefore no one is able to say by any objective standards what is 'easy' or 'difficult'. But if it is right that some basic nursing work is complex work, requiring the services of highly skilled nurses, it must also be right for the highly skilled to do such work, and to transmit those skills and the knowledge underpinning them, to those in training. It cannot be right for junior to lead junior, the blind to lead the blind.

In this study, there were variations between wards in the way nursing work was divided up between senior and junior nurses, but on all wards there was more teaching during technical rather than basic work. The emphasis in teaching was on the 'unusual'. The staff's perception of what is to do with education, may well be rooted in the system of nurse training, which requires that the learners who comprise the bulk of the workforce should move at regular intervals to further their education. The emphasis on practical skills reflects the reality of the situation. It is in the interests of both sisters and learners that new techniques are demonstrated at an early stage so that anxieties arising

from 'emergencies', in which learners are faced with unfamiliar work which is inevitably of a technical nature, are reduced to a minimum; hence the desire to seek out abnormal activities under controlled conditions.

The order in the ward accommodates the learners who are transient workers, and accommodates to them; but the order stresses work rather than learning. The sister is the person who establishes order and it is not surprising that, in the face of constant changes which periodically deprive her of part of her workforce, she should resort to devices to maintain order. The paradox is that these devices - routinisation of basic activities, role prescription, disease centred care and a system of task allocation - should inhibit teaching and learning, in the interests of which the frequent changes were originally made.

Alaszewski (1977) who researched in a hospital for the mentally handicapped, felt that the system of allocating learners to wards created an "unstable environment for both patients and nurses" which inhibited the evolution of ward teams, and resulted in a rigid routine that probably decreased learning opportunities (p. 462). Alaszewski sees a team and task allocation as diametrically opposed, and argues that a 'team' in which "division of labour is produced by internal negotiations within the group" requires as a precondition "an established and relatively stable membership". (p. 468).

Teamwork is frequently mentioned by the Committee on Nursing (1972) and they see the learner working under controlled circumstances as a member of a team. "Students would contribute to the work of the team whilst gaining experience in controlled situations under the supervision of nurse or midwife teachers and their clinical seniors on the ward". (p. 43). The findings of this research suggest that so long as learners retain worker status, the ward environment can only become

a learning environment if learners are integrated into the team of permanent workers. But they also confirm the findings of Alaszewski (1977) insofar as a rigid routine and hierarchical system of task allocation was found to inhibit learning opportunities.

The key to change is the ward sister. The findings from Charlotte ward show that where 'teamwork' is part of the sister's philosophy and she takes positive action to integrate learners into the team of permanent workers, and communicates freely with them, teamwork can become a reality. The sister determines the norms for a particular ward; others in the ward do what the sister says shall be done. The sister on Charlotte established a team despite the changes brought about by the nurse training programme. Therefore, Alaszewski (1977) is not entirely right when he says that a precondition to a team is "an established and relatively stable membership", for an alternative precondition to the establishment of a team is conscious effort on the part of the sister to destroy the traditional order in the ward with all that it implies - a rigid routine, system of task allocation, role prescription with nurses of different grades doing work according to a place in the hierarchy - and establishing a new order. The new order is anti-hierarchical with all ward actors able to enter into negotiations and exercise discretion in their work. But the team comprises trained and learner nurses who share the work.

Changes cannot be made lightly. Ward routines have evolved over many years to cope with the stresses and anxieties which are an integral feature of nursing work. The advantages of having rigid routines is that day-to-day minutiae need not be a cause of anxiety; the bulk of the work can be done with a minimum of communication and supervision. However, the disadvantages are that the patients become work objects and the needs of learners receive low priority. It may be

that the stresses and anxieties caused by the dismantling of established routines could not be tolerated by some sisters and other permanent staff members. The change from a traditional to a new order means moving learners from routine jobs which they are able to do to other jobs which they may not be able to do. It means moving permanent staff members from jobs they prefer to do to jobs which they may see as having low status. It means a reduction in work output, for work that can be done swiftly by trained workers would take longer when done by learners under supervision.

Routines have been devised to get the work done and it may be that on some wards with heavy work loads the change from a working to a learning environment would mean that the work would not get done with existing levels of staffing. The findings from Charlotte show that it is possible to achieve a learning environment whilst learners fulfil a dual role of worker and learner. However, the workload per nurse per hour and ratio of trained to learner nurses compared favourably with other wards and it may be that these must be at optimum levels before a change can be made; in other words, they are a precondition, but not an automatic guarantee, to the establishment of a learning environment. New et al (1950) found that when a ward was overstaffed with Registered Nurses they did not take over the work of aides. The variation in trained nurse activities between wards in this study suggest that additional trained nurses would not necessarily do routine work or undertake a teaching role unless the sister took positive action to control their activities.

The change from a working to a learning environment cannot be effected unless the sister accepts a teaching role. It is worth recalling that of eleven sisters who were interviewed in the first

stage of the research only one had received any training in how to carry out the teaching role which had been imposed upon her. Whatever happens in the future to change the status of the learner, there seems to be an urgent need for sisters to be taught how to fulfil their teaching role, which extends beyond the teaching which the sister herself does. The sister controls the learning environment, it is logical that she should be involved in fostering a spirit of enquiry in the future generation of nurses.

EPILOGUE

It is now twelve months since the thesis was completed and inevitably there has been time for reflection: ideas have matured and conclusions which were tentatively described in the preceding chapter have been reinforced. As an educationist well-versed in the merits of behavioural objectives (Bloom 1956, Gagné 1964, Krathwohl 1964) I was aware of the shortcomings of a methodology which relied heavily on data from learners to describe teaching and learning and for this reason did not wish to mislead the reader by being too dogmatic with my conclusions. I merely wished to point the members of the nursing profession towards areas which required further investigation. My preference would have been to measure ward teaching and learning in terms of outcome, by using objective measures but there were cogent reasons why this could not be done (p.3). Furthermore, after a search of the literature, it was also clear that in a relatively unexplored area what was needed was a lucid description of the ward teaching and learning occurring under a system which had remained basically unchanged for fifty years. In carrying out the research it was also imperative that the perceptual qualities of the research subjects were not altered so that they became aware of educational opportunities which would normally pass unnoticed. (see pages 171 and 172). The importance of this research is not that it provides absolute measures of ward teaching and learning (assuming such measures do or could exist) but that it provides valuable insight into the learners' (and other ward nurses') perception of their environment and their experiences in it.

The study explores the discrete incedents during which learner nurses build up their own personal store of knowledge and gives some insight into the conditions for learning. Knowledge in this sense is more than the written or spoken word: it includes a variety of things which are communicated from the environment. Sjoberg and Nett (1968) discuss the 'empirical assumption' and what they say has some relevance to this study.

> "Science assumes that a communication tie between man and the external universe is maintained through his own sense impressions. Knowledge is held to be a product of one's experiences, as facets of the physical, biological, and social world play upon the senses"(p.26).

They summarise that knowledge is not innate and point out that "almost all learning theory is based upon the 'empirical' assumption (p.27). Viewed in this light the question to learners "Were you told, or did you do, or see anything that you feel was important for your education as a nurse?" was particularly relevant for it elicited responses which showed how nurses 'communicated' with their environment: it provided data on what nurses select out of their environment, and - just as important - what they ignore.

In skill learning a chain of learning is gradually developed so that the performance of a skill becomes virtually automatic. We deal in a similar way with regularities in the environment so that "we cannot give adequate descriptions of familiar pavements or floors over which we habitually walk" (Stones 1966 p. 177). In the field of learning the phrase "familiarity breeds contempt" seems particularly appropriate for there is daily confirmation that we do not examine closely, items which are in regular use. For instance, how many people who regularly use banknotes are able to say that a picture of Isaac Newton adorns the back of a one pound note?

Nurses regularise their environment and the study provides ample evidence to suggest that as far as education is concerned nurses select out highly technical nursing and in some way close their minds during routine work. The unique function of the nurse is to observe and assess the needs of individuals who are in her care and to ensure that those needs are satisfied. But what a nurse observes depends on her perception of the patient: a human being or a work object. When we use a one pound note we have no need to turn it over to examine the picture of Isaac Newton: similarly if a nurse is merely set a task to 'do the pressure areas' of a sick person, she has no need to turn the patient over, examine his face, and enquire or assess whether any need is left unsatisfied. Even allowing for the difficulty which some nurse respondents in the study had in describing what was important for their education as opposed to what was important for the patient, careful re-examination of data confirmed the conclusion that some work does become automatic, and that during such work senses are dulled.

Questioning learners about what they had seen, done or heard did, of course, only identify teaching and learning of which they were aware, so in this sense the research does not give a complete picture of ward teaching and learning. It was recognised early in the study that one disadvantage of using learners as the main respondents was that they may not report some conversations which would reveal teaching (p.171). Combining interviewing with observations enabled the learners' responses to be cross-checked against observations. But observation methods similar to those used by King et al (1971) were not used to monitor the behaviour of trained nurses and learners to see whether the latter group imitated the former, therefore there was no way in which 'unconscious' learning could be described in this study. 'Unconscious' teaching, however, was identified and described as 'passive teaching' (pp. 233 - 6).

The thesis is entitled 'Socialisation of nurses: teaching and learning in hospital wards'. Certainly in this study, teaching was found to be a largely active process: active teaching outweighing passive teaching in a ratio of 9:1 during technical activities, and 4:1 during basic activities. The learning described in the study was, because of the methods used, the learning of which the learners were aware. But socialisation involves both conscious and unconscious processes as neophytes gradually become aware of the attitudes, values and culture of those around them. The unconscious socialisation of nurses is in the thesis by implication only, manifesting itself in the comments that learners made about their work (see Chapter 11). The most disturbing feature of this is the labelling of 'routine work' and the notion that such work is easy to do and has nothing to contribute to the learner's education. This study has merely uncovered further problems which must be pursued by other researchers, for this 'hidden curriculum' is a vast unexplored area.

In a lecture on medical education and human values, Marinker (1974) argues that in medical education there is a 'hidden curriculum', and although his statements are directed at medical education, I believe that they are equally applicable to nurse education.

> "A vast latent content of learning goes on unremarked. It is the declared curriculum which is manipulated by those concerned with curricular reform. The reform of what may be termed the 'hidden curriculum' has not yet been brought to the level of consciousness and reason" (p. 451).

Referring to the Report of the Royal Commission on Medical Education (1968) he notes that in clinical learning the student should "assimilate the ethos of medicine", and noting the absence of behavioural objectives clarifies what this may mean.

> "The hidden curriculum is not then to be the subject of conscious teaching, and it will be received by the student not through intellectual faculty, but by some unconscious process akin to the social adaption to a prevalent culture." (p. 451).

Thus the doctor models his behaviour and practices on those he sees around him. The emphasis is on cure rather than care. Just as the public image of the doctor emphasises the doctor hero coping with emergencies, so the image of the nurse is that of the doctor's right hand woman in these highly technical episodes. The image and the overt nursing curriculum emphasise tasks, techniques and diseases, but what is communicated via the hidden curriculum? What conclusions must the learner nurse draw about the importance of basic nursing or the proper function of the nurse, when she sees the trained nurse go off alone and unobserved to perform some highly technical procedure or consult with the doctor or carry out her 'office work'?

The problems are rooted in a system which is called an apprenticeship system but which denies both the trained and the learner nurses the one attribute on which such a system must be built; the apprentice (the learner) working with the craftsman (the trained nurse). The sister is responsible for ensuring that the patients receive care and so long as learners are full-time members of the working staff she must be forgiven for getting the work done by the most efficient workers that are available at the expense of nurse education (see comment foot p. 125). Little has been done to help the sister to fulfill her teaching role and she must constantly choose between the interests of patients and learners. Conflicts exist, are real and can be measured. As one sister remarked during pilot studies, "How can I take juniors with me to watch procedures and learn when I need them for other jobs?" On the positive side there was some evidence, particularly from Naomi, Charlotte and Neville wards, that learners

modelled their behaviour on the trained nurses who worked with them but limitations in methodology prevented firm conclusions being drawn.

Working Hypotheses

Throughout the research an open-minded approach was adopted, and as far as possible the research was built on previous results. The intention was to lay the foundations for future research into ward teaching and learning and to provide springboards for the future. For this reason the results of the first stage were set out in the form of working hypotheses and it was made clear on page 113 that some of these informed the second stage - the implication being that some could not be pursued. Three principal working hypotheses guided the second stage and all were supported.

1. Those wards in which learners learn a lot are those wards in which sisters make a conscious effort to make teaching a reality.

After a case study analysis of data reviewed in chapter thirteen this hypothesis was supported (see page 342). It was concluded that the sister's teaching role extended beyond the actual teaching she did, and that she could provide opportunities to learn and initiate teaching by others.

2. Trained nurses teach during specialist activities.

At the commencement of the study the research was underpinned by an assumption on which the system of nurse education is founded 'That sisters and trained nurses teach in the ward situation' (p.4). However, when data from sisters' interviews were analysed hypothesis 2 above was formulated (pp. 142-143 and 158). Data reviewed on pages 246 - 247 gave some support for this hypothesis. Trained staff were not only involved with learners in more technical than basic activities but there was a higher

percentage of teaching in those technical activities compared with the basic activities.

3. Student and pupil nurses learn during some work activities. As with hypothesis 2, this hypothesis was developed from an assumption on which nurse education is founded and later altered after analysis of data from sisters and learners in the first stage of the research. On the basis of data discussed in chapter twelve the hypothesis was supported and altered in the following way:

> "Student and pupil nurses learn during some work activities, but learning varies with the type of work, frequency of job performance, experience and stage of training of the learner, the work companion and the ward" (p. 272).

One of the problems in adopting an open-minded approach in such a vast relatively unexplored area as ward teaching and learning is that data becomes enveloped in a thick, persistent fog. Since so little previous research existed there was no point in restricting the pursuit of truth (p. xiii) by adopting narrow hypotheses, but at the same time the research needed some direction. The working hypotheses provided direction, but with the exception of the three specific hypotheses described above, whether or not hypotheses were addressed, depended on the nature of the data which the various methods produced. One of my main regrets was that at the commencement of the second stage I did not feel able to pursue research into the 'ward atmosphere' lest the collection of data on ward teaching might be jeopardised. However, an element of flexibility in the methodology meant that important data concerning staff relationships and ward atmosphere could be recorded, and when considered in a case study analysis of the wards, contributed to an understanding of the ward learning environment and the ward sister's role.

Whilst it was not possible to consider all the working hypotheses listed on pages 113 - 114 because of the sheer volume of work and differing methods that would be necessary, supporting data for some of the hypotheses did emerge and are worthy of discussion and tentative conclusion. Only those hypotheses for which data exists will be discussed here - the remaining hypotheses must be pursued by others.

A heavy workload is a factor which may inhibit ward teaching.

As the reader is aware, the workload per nurse per hour was measured on each of the six wards during the second stage and was found to be higher on the low rated wards in each pair (Chapter ten and p. 194). However, there were only two wards on which the heavy workload could be seen as inhibiting teaching - Naomi and Elizabeth. Significantly, these were the two wards which were described by the sample of learners in the first stage as having a heavy workload which prevented teaching. This means that over a period of at least three years the learners working on those two wards felt that excessive work demands interfered with their education. Data from sisters, my own observations and the workload measurements provided the 'triangulation' and thus enabled the above hypothesis to be supported.

However, it did not follow that a low workload meant an increase in teaching, for there appeared to be no relationship between the workload and the teaching that was discovered. The implications of these findings are that in seeking to improve ward teaching, nurse administrators should aim for an optimum level of workload per nurse per hour which would allow ward sisters the opportunity to create a learning environment, but it should be stressed that relieving ward nurses of a heavy workload is not in itself sufficient to improve ward teaching and learning.

Similarly, the ratio of trained to learner nurses does not appear to be related to the teaching and learning occurring in wards. It does not follow that an influx of trained nurses on to a ward means that these nurses will do more teaching. Observations on some of the wards showed that under these circumstances trained nurses often shut themselves away in the office, away from learners. Only on Naomi ward did an unfavourable ratio of trained to learner nurses appear to inhibit teaching.

Basic nursing activities are perceived as 'work' rather than 'learning' activities.

Data to support this hypothesis were fairly conclusive and are discussed in chapter eleven and referred to specifically on page 222. Learners involved in only 42.4 per cent of 256 basic activities felt that participation was important for their education. This was half the corresponding percentage for technical activities, and is relatively low when the purpose sampling of teaching and potential teaching activities is taken into account. Basic work tended to be distributed by the sister via 'block' instructions and no nurse on any ward asked to do a basic nursing activity in order to satisfy a learning need. As far as the physical performance of work was concerned, learners felt fully competent in over 80 per cent of the basic nursing activities, and comments from some learners that basic activities were hard work or 'just a job' also gave support to the hypothesis.

Nurses like working on wards which have good staff relationships and ward atmosphere, and where there is an interest in teaching learners.

Qualitative data discussed in the cast study analysis of each ward support this hypothesis (chapter 13). Nurses frequently referred to the interest (or lack of interest) that was shown in them by the trained nurses and were constantly monitoring interactions between the two groups. It

was clear that the nurses looked to the sister to create the atmosphere on the ward, and they sought constant reassurance that their needs as learners were acknowledged. Thus a single statement by a sister inviting a new nurse 'not to be afraid to come into the office' was not sufficient in itself, to ensure continuing good relationships.

Poor staff relationships and inadequate teaching are the two main reasons for learners' dislike of wards.

On wards where the trained nurses rarely taught, learners frequently expressed their dissatisfaction. However, data were not collected in a way that would allow 'poor staff relationships and inadequate teaching' to be described as the two main reasons for learners' dislike of wards, but clearly they were factors which generated some discontent. Findings were consistent with those of Birch (1975) in whose study 98 per cent respondents gave 'poor staff relationships' as a reason for withdrawing from nursing.

On wards where the concept of 'total patient care' is practised, learners do not perceive the patient as a 'work object'.

Data from Elizabeth ward supported this hypothesis. It was the only ward on which learners consistently maintained that they were practising 'total patient care' and in their own minds they felt that they knew more about their patients as individuals. Data tabulated on page 225 shows that the learners on this ward tended to notice and report more about their patients

Conversely, data from Irena and Heaton wards also suggest that on wards where there is a rigid routine and system of task allocation, nurses doing routine work appear to do much of their work automatically without being aware of their patients as individuals. That is not to say that no nurse on these two wards reported anything to show that she was concerned about an individual patient, but that it seemed that learners could do their work without thinking about it.

Implications and recommendations for the future.

I should explain that the results from Heaton ward were a surprise and cause for much deliberation in the second stage), for the ward and the sister were highly regarded by the first sample of learners, and therefore it was reasonable to expect that examples of teaching/learning activities would flood out during data collection and analysis. The dearth of these activities during routine work were a puzzle for which no easy explanation could be found. It was as a result of wrestling with the unexpected data from Heaton that the insight into the problems of communication and ward teaching and learning developed. When the routine is seen on the one hand as a stabilising factor in the establishment of social order in the ward and on the other as an inhibitor to communication and ward teaching and learning, many of the problems in nursing and nurse education can be explained.

As for the future, the struggle to introduce change in the ward, whether it involves the introduction of total patient care or the nursing process, or an improvement in ward teaching and learning, inevitably leads to disorder whilst old safe routines are dismantled and new ones established. It is understandable that sisters, who create and control the routine, should resist any effort to relinquish a device which has stood the test of time and enabled the ward workers to get the work done. But any move away from automatic work routines towards individualised patient care should rekindle a spirit of enquiry and facilitate the transmission of nursing knowledge.

This thesis has described in some detail how emerging professionals acquire a body of knowledge which is generally recognised as one of the key attributes of a profession. It has shown how a bureaucratic/professional conflict affects those who are working at the 'grass roots'. The conflicts concern the transmission of nursing knowledge. Past events suggest that

the State through its bureaucratic National Health Service is interested only in the acquisition of a labour force that will do the work for the minimum outlay. The profession on the other hand is anxious to develop and communicate a body of nursing knowledge to the learner nurses. The study confirms that conflicts between nursing service and education are a ward reality.

During their allocation to a ward, learners expect that trained nurses in the ward will communicate nursing knowledge to them. Whether or not their expectations are met depends on how the sister perceives her role. The results show that the sister controls the ward environment and it is the sister who must constantly strive to create an environment which is conducive to learning.

But the State, through the National Health Service, places no value on the sister's teaching role. In a democratic society where the accepted method of reward is financial, the State, i.e. D.H.S.S. through the R.H.As., gives no financial reward to the sister to carry out the teaching role which is ascribed to her. The Halsbury pay awards took account of the teaching role of the sister but all ward sisters receive the same salary whether in practice they teach or not. As a tutor, Johnson (1979) points out, the services of 'nursing colleagues' as teachers "would be invaluable but in fact are valueless" (p. 1670). Whilst both sisters and consultants are paid a salary by the National Health Service, policy-makers have decreed that the consultant can be paid for conveying the knowledge that he holds, but not the sister and other trained nurses, except those who are employed in the School of Nursing. Policy-makers and administrators, by exerting moral pressures and invoking a sense of duty, exhort the sisters and nurses to teach and they assume that these nurses have an innate ability to teach.

No systematic training for the teaching role is given by any of the State Agencies - D.H.S.S. N.H.S. or G.N.C. The sister can no longer be neglected. The sister is the key to change - it is through her that progress in the fields of education and nursing practice can be made, and it is right that she should be trained for this task and should be rewarded for the extra effort that she must expend.

APPENDICES

OPINION SURVEY OF WARDS

WARD..... NURSE NUMBER.....

YEAR OF TRAINING WHEN ON ABOVE WARD.....

The following statements are concerned with nurse training in the ward situation. For each group of statements, please ring the letter (a,b,c,or d)of the statement which is closest to your own view e.g.(a) Ring ONE letter for each group. YOUR opinion is what matters , so please indicate your view for all questions.

1. a. There was very much to learn on this ward.
   b. There was a lot to learn on this ward.
   c. There was quite a lot to learn on this ward.
   d. There was hardly anything to learn on this ward.

2. a. The consultants were definitely not interested in teaching nurses.
   b. The consultants were not really interested in teaching nurses.
   c. Some consultants were quite interested in teaching nurses.
   d. Some consultants were very interested in teaching nurses.

3. a. Not many learners would benefit from working on this ward.
   b. I don't really know whether other learners would benefit from working on this ward.
   c. I think most learners would benefit from working on this ward.
   d. I think all learners would benefit from working on this ward.

4. a. The ward sister taught me very many things.
   b. The ward sister taught me a lot of things.
   c. The ward sister taught me quite a lot of things.
   d. The ward sister hardly taught me anything.

5. a. There was always someone to supervise new procedures.
   b. There was usually someone to supervise new procedures.
   c. There was sometimes someone to supervise new procedures.
   d. There was rarely anyone to supervise new procedures.

6. a. I learnt little on this ward.
   b. I learnt quite a lot on this ward.
   c. I learnt a lot on this ward.
   d. I learnt very much on this ward.

7. a. Clinical teachers taught frequently on this ward.
   b. Clinical teachers sometimes taught on this ward.
   c. Clinical teachers hardly ever taught on this ward.
   d. Clinical teachers never taught on this ward.

8. a. This is the best ward I have worked on.
   b. This is one of the best wards I have worked on.
   c. This ward is no worse and no better than other wards I have worked on
   d. This is one of the worst wards I have worked on.

9. a. I did not like working on this ward.
   b. I did not mind working on this ward.
   c. I liked working on this ward.
   d. I liked working on this ward very much.

APPENDIX 2

OPINION SURVEY OF WARDS.

TUTOR / CLINICAL TEACHER (Please delete whichever is not applicable).

WARD.....

The following statements are concerned with nurse training in the ward situation. For each statement, please indicate your opinion by placing a tick in ONE OF the five boxes.
If you wish to clarify or explain your choice, please make your comments in the box provided.

	Strongly agree	Agree	Uncertain	Dis-agree	Strongly disagree	COMMENTS
1. There is a good variety of learning experiences in this ward.						
2. The consultants show little interest in teaching nurses on this ward.						
3. I consider this to be a poor ward for learners.						
4. The learners get good supervision when learning new procedures.						
5. The ward sister is interested in teaching the learners.						
6. Nurses learn very little on this ward.						
7. Clinical teachers teach frequently on this ward.						
8. I rarely get co-operation when visiting this ward.						
9. From a learning point of view this is certainly one of the best wards in the hospital.						

APPENDIX 3

INTERVIEW SCHEDULE FOR WARD SISTERS IN GENERAL HOSPITALS

Introduction

I am researching into how nurses learn in the ward situation, and I am interested in your opinion on this subject as it relates to your particular ward. The information obtained from this interview is strictly confidential. In no circumstances will any information be disclosed to any member of the hospital staff. No names will be used in any future publications and anonymity will be preserved in all circumstances.

SECTION A WARD

Can you first of all give me some information about your ward.

1. What type of ward is it?
2. What is the sex of patients?
3. How many beds are on the ward?
4. How many patients are in the ward at the moment?
   Is this typical?
5. What type of illnesses do patients in your ward suffer from?
   (Acute, chronic, acute and chronic)
6. Can you give me examples of the most common illnesses?
7. What is the most common illness?
8. How many patients in the ward at the moment have this condition?
   Is this typical?
9. What is the average length of stay of patients suffering from the conditions you mention?
10. How many patients in the ward at the moment are in the following age groups? (Under 2, 2 - 14, 15 - 40, 41 - 60, over 60).

11. What do you estimate is the average age range of patients?

12. How would you describe the type of nursing you do on this ward?

(a) Mainly curative, mainly caring, equally curative and caring.

(b) Basic, technical, equally basic and technical.

12(c) What do you understand by basic nursing? (Probe - examples)

12(d) What do you understand by technical nursing? (Probe-examples)

13(a) What is your usual staffing allocation?

13(b) How long have the permanent members of staff been on your ward?

13(c) How long do learners usually stay on your ward?

13(d) How would you describe the length of time they stay here?

(Too long, too short, about right, other - specify).

Why do you say that?

SECTION B THE WORK ON THE WARD

1(a) What kind of nursing activities form the bulk of the work on the ward? (Probe frequency of occurrence)

1(b) What is the most essential work?

2. I would like you to assess how much there is to learn on this ward. (Card a).

Which of the statements on the card is closest to your own view?

(a) There is very much to learn on this ward.

(b) There is a lot to learn on this ward.

(c) There is quite a lot to learn on this ward.

(d) There is hardly anything to learn on this ward.

Why do you say that?

3. Do you think that student and pupil nurses find the work on the ward interesting?

Why do you say that?

4(a) Can you tell me 6 of the important things that you expect ALL nurses to learn whilst they are on this ward?

4(b) Do they all learn these 6 things?

4(c) How would you know that they had learned them?

4(d) Do the nurses learn these 6 things only on this ward or can they learn them anywhere else?

5. Do you tell the nurses what you expect them to learn? (Probe when)

6(a) Can you think of anything which occurs as a nursing activity on this ward, but which all nurses do NOT learn?
(Check frequency of occurrence, basic and technical activities).

6(b) What do you believe are the reasons for nurses NOT learning these?

6(c) Are the learning opportunities on this ward relevant to nurses at all stages of training?

7(a) Do you expect nurses to learn how to nurse patients with particular conditions?

7(b) How do they learn this? (Probe)

8. When are the busiest periods of the day?

9(a) Is there a routine for allocating the work during these busy periods? (Probe - to whom is what work allocated?)

9(b) Who decides the routine?

9(c) Who allocates the work?

10. Is the allocation of work on the ward the same every day?

11. When are the slack periods?

12. What do staff members do during the slack periods?

SECTION C SISTER'S ROLE

The following questions are concerned with your role as a ward sister.

1(a) Can you tell me what your 5 most important activities as a ward sister are?

1(b) Which do you think takes up the most time?

I have taken some items from a job description for a ward sister in another hospital and would like to know how they relate to this ward.

2. Assisting medical staff and ascertaining medical treatments (Card T)

   How often do you deal with this duty?

   Have you a routine?

   Do you usually do it?

   If you delegate, to whom would you delegate?

   Can you recall the last time this occurred?

3. Maintaining personal contacts with patients through ward rounds, conversations, etc. (Card U)

   How often do you deal with this duty?

   Have you a routine?

   What opportunities do other staff members have for maintaining personal contacts with patients?

4. Introducing new staff members to their duties (Card W)

   Have you developed a routine? (Check. Students, pupils, what said, what shown, why)

   Do you usually do it?

   If you delegate, to whom would you delegate?

   Can you recall the last time this occurred?

5. Teaching student and pupil nurses. (Card X)

   How often do you deal with this duty?

   Have you developed a routine? (Probe - Theory, practical, special procedures, teaching methods)

   Do you usually do it?

   Does anyone else teach? What do they do?

   Who do you think should have MAJOR responsibility for seeing that nurses learn in the ward?

   Why do you say that?

6. Carrying out some nursing procedures and treatments. (Card Y).

   How often do you do this yourself?

   Have you developed a routine?

   What procedures do you usually do?

7. Can you give the activities we have discussed, as much attention as you would like?

   Why do you say that?

SECTION D EDUCATION OF STUDENT AND PUPIL NURSES

1. Do you form the impression that some nurses learn more than others whilst working on your ward?

   Why do you say that?

2. Do you think this ward is good for learners at all stages of training?

3. Are you satisfied with what nurses learn during their stay on this ward?

4. Do you believe that you teach more to nurses who seem to be interested or does it make no difference?

5. How do you know if nurses are interested?

6. To your knowledge, whom do nurses ask, if they want to know the following when they are working on the ward?

   (a) Some practical aspect of a job they are performing.

   Can you give me an example of a question of this type, that you have been asked recently? (Probe - when, what asked, who asked, what responded).

   (b) Some theoretical aspect of a job they are doing - i.e. why it is being done, why in a particular way.

   Can you give a recent example of such a question (Probe as above)

   (c) Theoretical detail of a patient's disease (Probe as above).

7. Do you ask questions to assess the nurses' knowledge?

   Can you recall a recent occasion? What did you ask and what did you find out?

8. Are the doctors interested in teaching learner nurses?

Why do you say that?

9. Do the nurses go on doctors' rounds? Yes. No.

If 'Yes', Do they learn by going on the round?

If 'No', Do you think there would be any value in them going on the round?

If 'Yes', Why don't they?

10. Do you think it makes a sister's job easier if nurses have had lectures in the school related to the type of nursing that occurs on their ward? Can you explain that?

11. Do you know what previous teaching nurses have had in wards?

If 'Yes', Does it help to know?

If 'No', Would it help to know?

12. Do you know what subjects are taught in the school and when they are taught?

If 'Yes,'Does it help to know?

If 'No', Would it help to know?

13. Do you know which wards nurses have previously worked on?

If 'Yes', How did you find out?

Does it help to know?

If 'No', Would it help to know?

14. Some people think that learner nurses should only be on the ward for specific learning purposes (i.e. supernumary); others that they can only learn nursing 'on the job'. Would you support either view?

Why do you say that?

15. What aspects of nursing are better taught in the school?

Why do you say that?

16(a) Where should the practical nursing skills be taught and practised? (In school, in the ward, in school and ward).

Why do you say that?

16(b) Where should the theory of nursing procedures be taught? (Why procedures carried out, why in a particular way)

(In school, in ward, in school and ward).

Why do you say that?

16(c) Should procedures practised in the ward be the same as those taught in the school?

Why do you say that?

17. Are you satisfied with liaison between school and ward?

18. In what aspects do you feel you possess more skill and knowledge than tutors and clinical teachers?

19. Do you feel that there are any aspects of nursing on which tutors and clinical teachers have superior skills and knowledge to you?

20. Is there sufficient opportunity for you to teach your skills and knowledge in the ward situation?

21. Would you be interested in going into either a school or college of nursing to teach specific topics?

22. Have you ever considered going into either teaching or administration?

23(a) Do you like teaching?

(b) Do you think this affects the amount of teaching you do? (Probe)

24. During this interview we have talked a lot about teaching. What do you mean by teaching?

25(a) Have you been on any courses which have included teaching subjects?

(b) Have you been on any courses which have included management subjects?

26(a) Have you been on an 'Art of examining course'?

(b) Are you an assessor for the GNC?

If 'Yes', Has being an assessor helped you in any way?

Has being an assessor hindered you in any way?

27. What opportunities are there for sisters to keep 'up to date' with new nursing practices and to extend their knowledge?

28. Should ward sisters have the opportunity to attend more courses?
If 'Yes', What subjects would you like to see included in these courses? Should these be 'in service' courses or should they take place away from the hospital setting?
Why do you say that?

29. Are you satisfied with the present system of nurse education?
Why do you say that?

30. Are there any changes you would like to see implemented?
If 'Yes', Can you explain why?

31. Finally, can you tell me how long you have been in your present post?
Do you enjoy being a ward sister?

APPENDIX 4

Chart and Table showing responses to questions 1 and 6

Question 1	a There was very much to learn on this ward.	Score 4
	b There was a lot to learn on this ward.	Score 3
	c There was quite a lot to learn on this ward.	Score 2
	d There was hardly anything to learn on this ward.	Score 1
Question 6	d. I learnt very much on this ward.	Score 4
	c I learnt a lot on this ward.	Score 3
	b I learnt quite a lot on this ward.	Score 2
	a I learnt little on this ward.	Score 1

NB To facilitate comparison between questions, all statements and responses are placed in positive to negative order. Thus in the tables showing percentage of responses, the left hand column concerns the extreme positive response ie the statement receiving a score of 4.

1 2 3 4

WARD	N	Mean Score		Percentage of responses. 4	3	2	1
Charlotte	25	3.64	Q.1	75	12	12	0
		3.12	Q.6	48	20	28	4
Wendy	16	3.63	Q.1	69	25	6	0
		3.0	Q.6	38	31	25	6
William	24	3.33	Q.1	54	25	21	0
		3.0	Q.6	29	42	29	0
Merton	6	3.17	Q.1	33	50	17	0
		3.0	Q.6	33	33	33	0
Simon	30	3.37	Q.1	50	37	13	0
		2.83	Q.6	27	33	27	3
Neville	24	3.33	Q.1	54	25	21	0
		2.8	Q.6	21	38	41	0
Heaton	27	2.93	Q.1	26	44	26	4
		2.67	Q.6	19	37	37	7
Frederick	15	3.33	Q.1	53	27	20	0
		2.67	Q.6	20	33	40	7
Elizabeth	30	3.27	Q.1	43	43	10	4
		2.43	Q.6	10	37	40	13
Irena	25	2.72	Q.1	20	36	40	4
		2.24	Q.6	4	36	40	20
Ursula	41	2.22	Q.1	10	24	44	22
		2.04	Q.6	10	15	41	34
Naomi	36	2.64	Q.1	17	33	47	3
		1.94	Q.6	3	25	36	36
Peter	15	1.8	Q.1	0	27	27	46
		1.73	Q.6	7	7	40	46
Grace	15	1.87	Q.1	8	8	46	38
		1.69	Q.6	0	15	39	46

APPENDIX 4 (cont...

Chart and table showing responses to question 2

Question 2
- d Some consultants were very interested in teaching nurses. Score 4
- c Some consultants were quite interested in teaching nurses. Score 3
- b The consultants were not really interested in teaching nurses. Score 2
- a The consultants were definitely not interested in teaching nurses. Score 1

WARD	N	1 2 3 4	Mean score	% of responses 4	3	2	1
Charlotte	25		3.08	36	40	20	4
Wendy	16		2.69	12	63	6	19
William	24		1.63	0	8	46	46
Merton	6		3.67	67	33	0	0
Simon	30		2.43	20	23	37	20
Neville	24		3.0	25	50	25	0
Heaton	27		2.52	15	37	33	15
Frederick	15		3.6	66	27	7	0
Elizabeth	30		2.27	6	30	47	17
Irena	25		2.56	16	36	36	12
Ursula	41		2.68	27	36	15	23
Naomi	36		2.08	6	17	58	19
Peter	15		2.07	7	27	33	33
Grace	13		2.62	8	54	31	7

APPENDIX 4 (Cont...

Chart and table showing responses to question 3

Question 3

d I think all learners would benefit from working on this ward. Score 4
c I think most learners would benefit from working on this ward. Score 3
b I don't really know whether other learners would benefit from working on this ward. Score 2
a Not many learners would benefit from working on this ward. Score 1

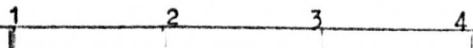
WARD	N	1 2 3 4	Mean score	% of responses 4	3	2	1
Charlotte	25		3.6	60	40	0	0
Wendy	16		3.31	56	25	13	6
William	24		3.42	58	25	17	0
Lerton	6		3.17	17	83	0	0
Simon	30		3.27	44	43	10	3
Neville	24		3.25	46	33	21	0
Heaton	27		3.3	44	41	15	0
Frederick	15		3.4	54	33	13	0
Elizabeth	30		2.73	20	47	20	13
Irena	25		2.64	8	52	36	4
Ursula	41		2.43	17	34	25	24
Naomi	36		2.56	11	45	33	11
Peter	15		2.0	7	33	13	47
Grace	13		2.31	8	31	46	15

APPENDIX 4 (Cont...

Chart and Table showing responses to question 4

Question 4

a The ward sister taught me very many things. Score 4
b The ward sister taught me a lot of things. Score 3
c The ward sister taught me quite a lot of things Score 2
d The ward sister hardly taught me anything. Score 1



WARD	N	Mean score	Percentage of responses Score 4	3	2	1
Charlotte	25	3.0	40	24	32	4
Wendy	16	2.44	19	25	37	19
William	24	2.67	29	17	46	8
Merton	6	2.83	17	50	33	0
Simon	30	2.27	13	20	47	20
Neville	24	2.96	29	42	25	4
Heaton	27	2.93	30	37	30	3
Frederick	15	2.8	33	27	27	13
Elizabeth	30	1.8	3	10	50	37
Irena	25	1.48	0	12	24	64
Ursula	41	2.05	10	19	37	34
Naomi	36	1.61	6	6	33	55
Peter	15	1.6	0	13	33	54
Grace	13	1.54	8	0	31	61

APPENDIX 4 (Cont...

Chart and Table showing responses to question 5

Question 5 · a There was always someone to supervise new procedures. Score 4
b There was usually someone to supervise new procedures. Score 3
c There was sometimes someone to supervise new procedures. Score 2
d There was rarely anyone to supervise new procedures. Score 1

WARD	N	1 2 3 4	Mean score	% of responses 4	3	2	1
Charlotte	25		3.52	56	40	4	0
Wendy	16		3.88	88	12	0	0
William	24		3.38	42	54	4	0
Merton	6		3.84	83	17	0	0
Simon	30		3.4	47	47	6	0
Neville	24		3.38	50	38	12	0
Heaton	27		3.63	78	11	7	4
Frederick	15		3,87	87	0	13	0
Elizabeth	30		2.5	13	40	30	17
Irena	25		3.05	52	8	32	8
Ursula	41		2.32	20	27	19	34
Naomi	36		3.14	36	42	22	0
Peter	15		2.67	27	33	20	20
Grace	13		2.39	16	23	46	15

APPENDIX 4 (Cont...

Chart and Table showing responses to question 7

Question 7
a Clinical teachers taught frequently on this ward. Score 4
b Clinical teachers sometimes taught on this ward. Score 3
c Clinical teachers hardly ever taught on this ward. Score 2
d Clinical teachers never taught on this ward. Score 1

WARD	N	1 2 3 4	Mean score	% of responses 4	3	2	1
Charlotte	25		3.72	76	20	4	0
Wendy	16		1.0	0	0	0	100
William	24		3.54	58	38	4	0
Merton	6		1.0	0	0	0	100
Simon	30		3.57	70	24	3	3
Neville	24		3.63	71	25	0	4
Heaton	27		1.26	0	4	18	78
Frederick	15		1.8	0	33	13	54
Elizabeth	30		3.3	40	50	10	0
Irena	25		3.36	40	56	4	0
Ursula	41		3.76	83	15	0	2
Naomi	36		3.11	31	56	8	5
Peter	15		1.0	0	0	0	100
Grace	13		3.23	46	31	23	0

APPENDIX 4 (Cont...

Chart and table showing responses to question 8.

Question 8
a This is the best ward I have worked on. Score 4
b This is one of the best wards I have worked on Score 3
c This ward is no worse and no better than other wards I have worked on . Score 2
d This is one of the worst wards I have worked on. Score 1

WARDS	N	Mean score	% of responses 4	3	2	1
Charlotte	25	3.0	20	60	20	0
Wendy	16	2.75	13	56	25	6
William	23	2.96	17	61	22	0
Merton	6	2.67	17	33	50	0
Simon	30	3.1	23	64	13	0
Neville	24	2.7	0	63	21	8
Heaton	27	3.15	37	44	15	4
Frederick	15	2.67	7	53	40	0
Elizabeth	30	2.27	7	33	40	20
Irena	25	2.12	0	36	40	24
Ursula	41	2.39	10	41	27	22
Naomi	36	2.06	6	28	33	33
Peter	15	2.13	7	20	53	20
Grace	13	2.0	0	23	54	23

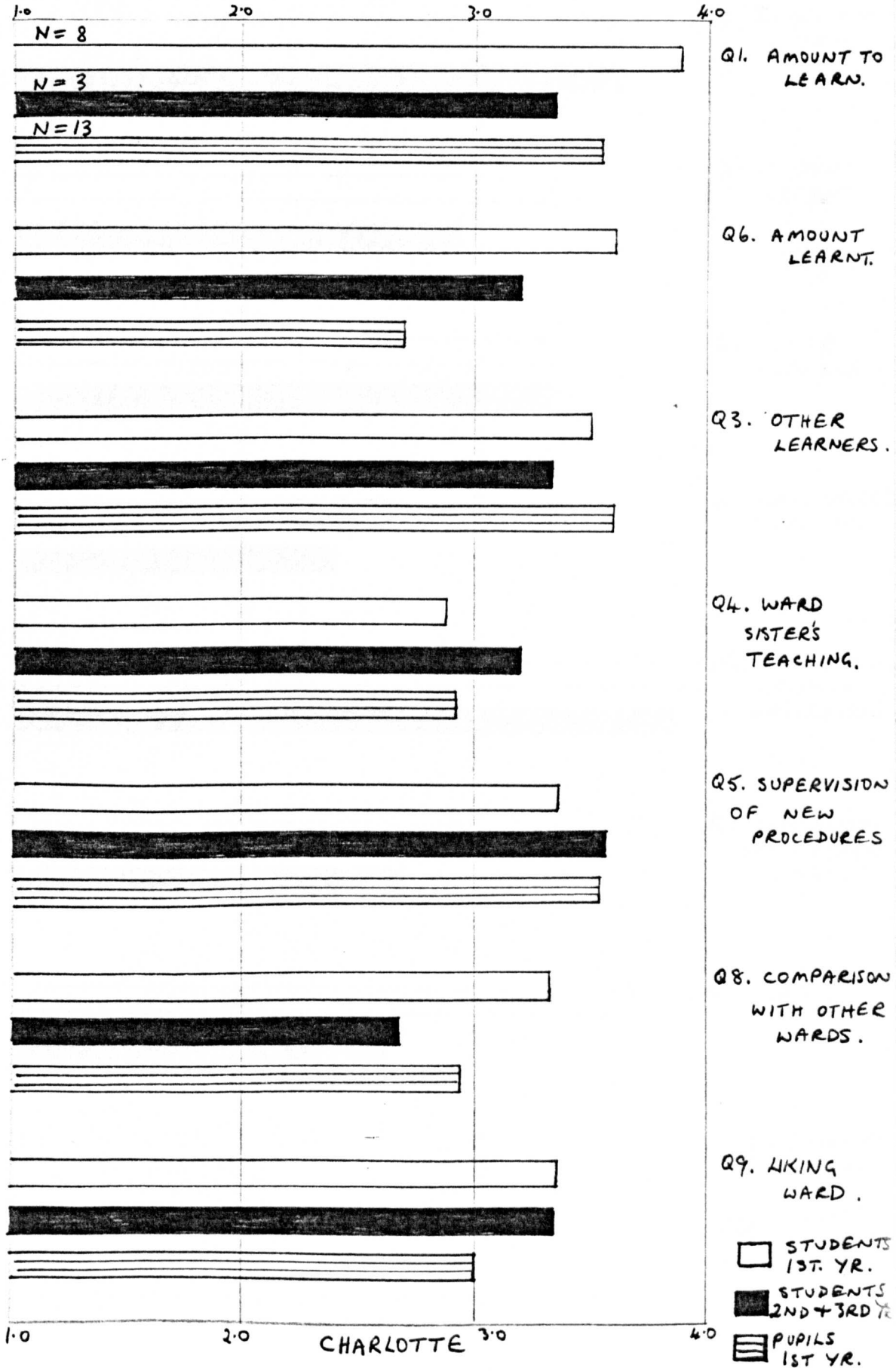
APPENDIX 4 (Cont...

Chart and Table showing responses to question 9

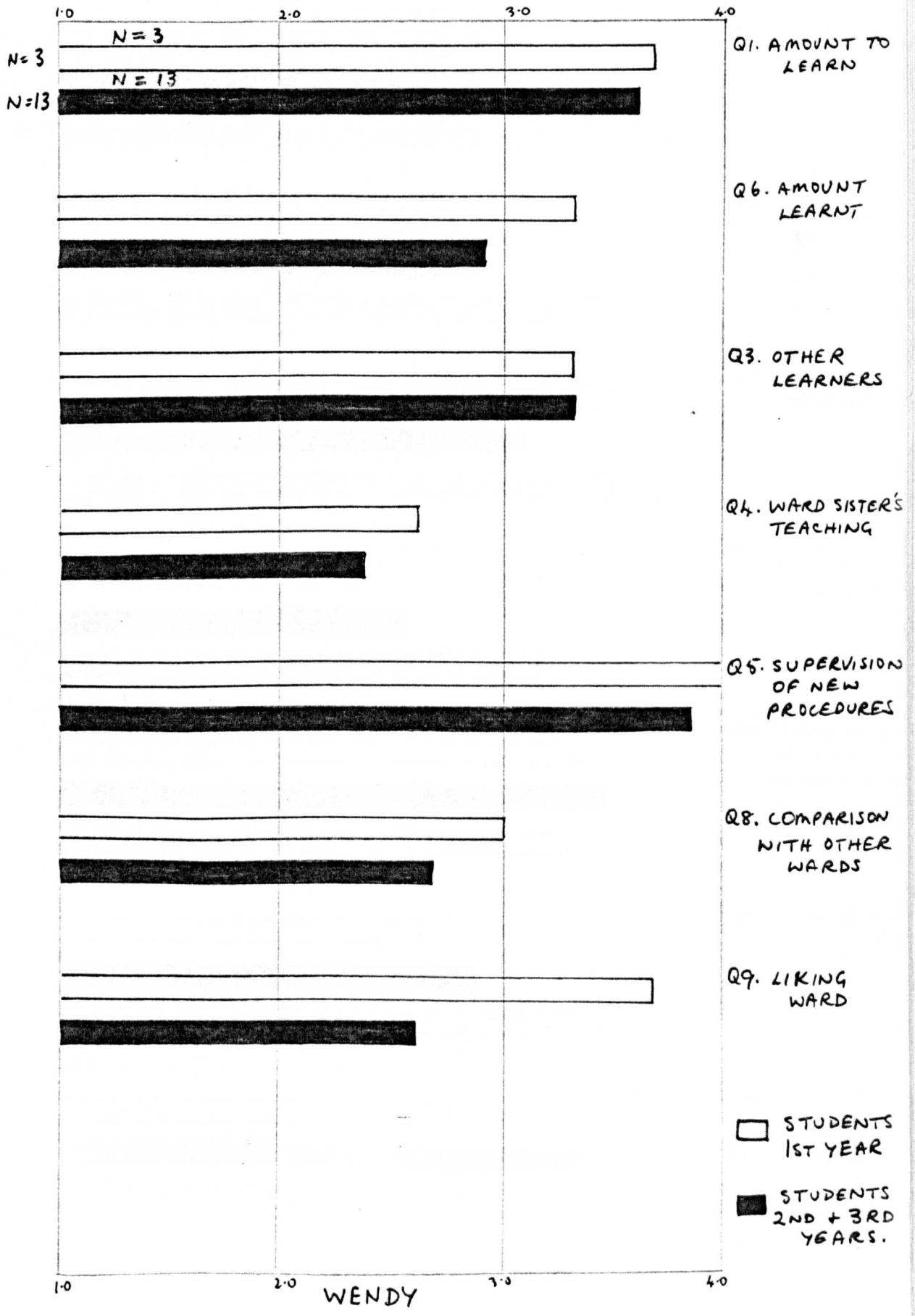
Question 9
- d I liked working on this ward very much, Score 4
- c I liked working on this ward. Score 3
- b I did not mind working on this ward. Score 2
- a I did not like working on this ward. Score 1

WARD	N	1 2 3 4	Mean score	% of responses 4	3	2	1
Charlotte	25		3.24	52	28	12	8
Wendy	16		2.81	19	56	12.5	12.5
William	24		3.33	42	50	8	0
Merton	6		3.17	33	50	17	0
Simon	30		3.43	50	43	7	0
Neville	24		3.04	29	50	17	0
Heaton	27		3.56	67	22	11	0
Frederick	15		2.93	20	53	27	0
Elizabeth	30		2.67	16.6	50	16.6	16.6
Irena	25		2.24	4	48	16	32
Ursula	41		2.73	17	49	24	10
Naomi	36		2.36	17	22	42	19
Peter	15		2.0	7	13	53	27
Grace	13		2.31	15	8	69	8

APPENDIX 5


1·0
2·0
3·0
4·0
N = 8
N = 3
N = 13
Q1. AMOUNT TO LEARN.
Q6. AMOUNT LEARNT.
Q3. OTHER LEARNERS.
Q4. WARD SISTER'S TEACHING.
Q5. SUPERVISION OF NEW PROCEDURES
Q8. COMPARISON WITH OTHER WARDS.
Q9. LIKING WARD.
STUDENTS 1ST. YR.
STUDENTS 2ND + 3RD YR.
PUPILS 1ST YR.
1·0
2·0
CHARLOTTE
3·0
4·0

APPENDIX 5 (Cont...



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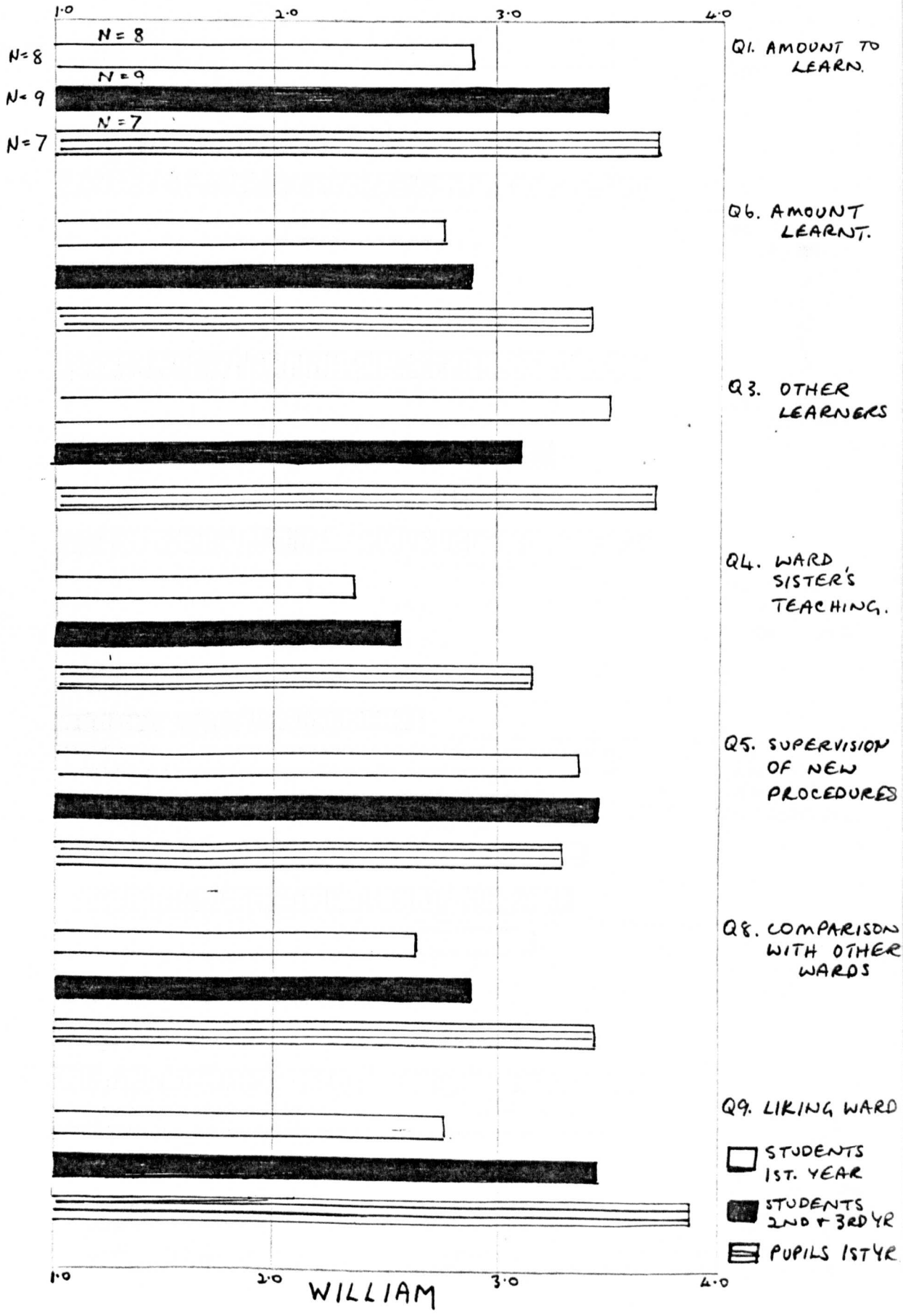

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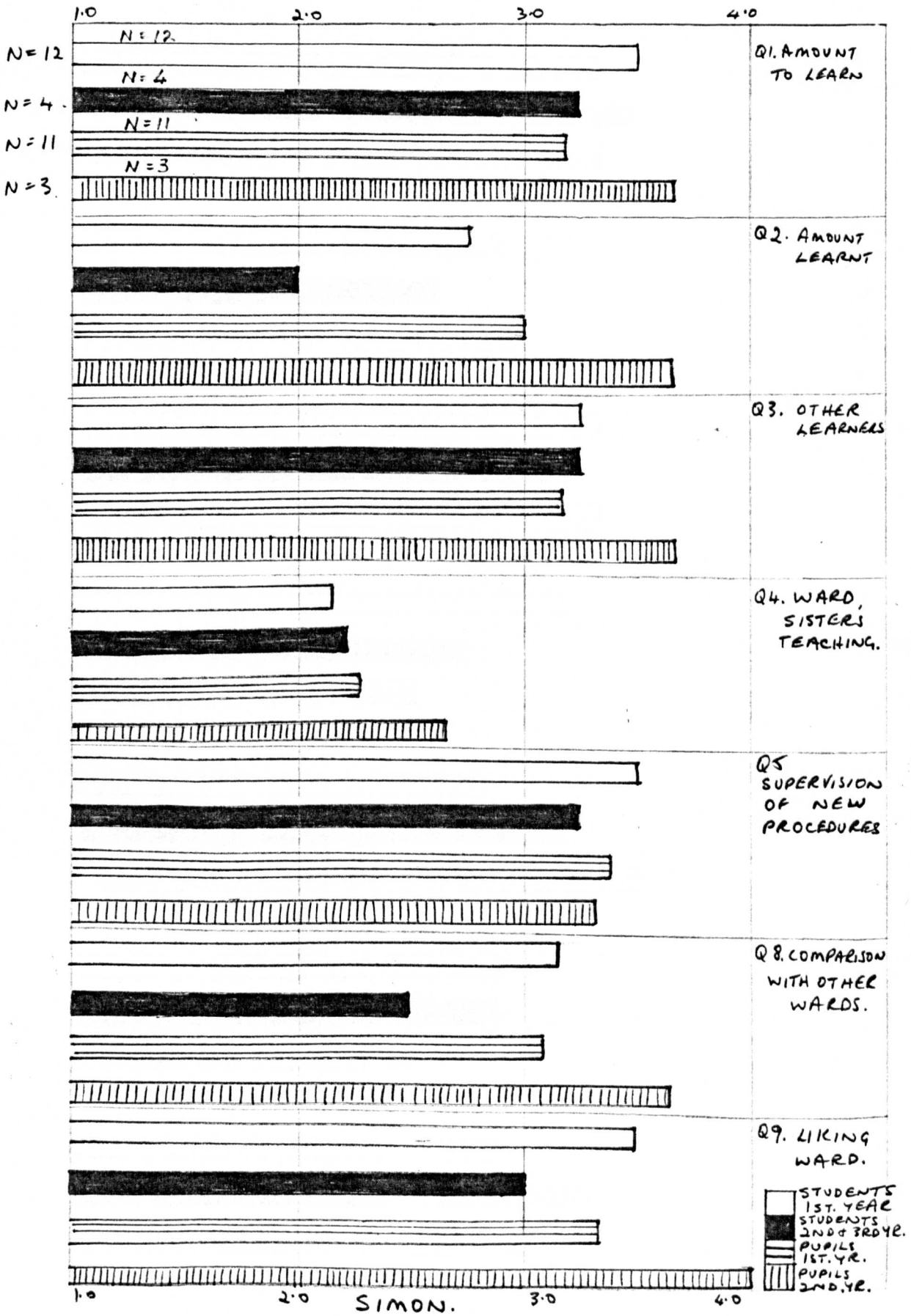

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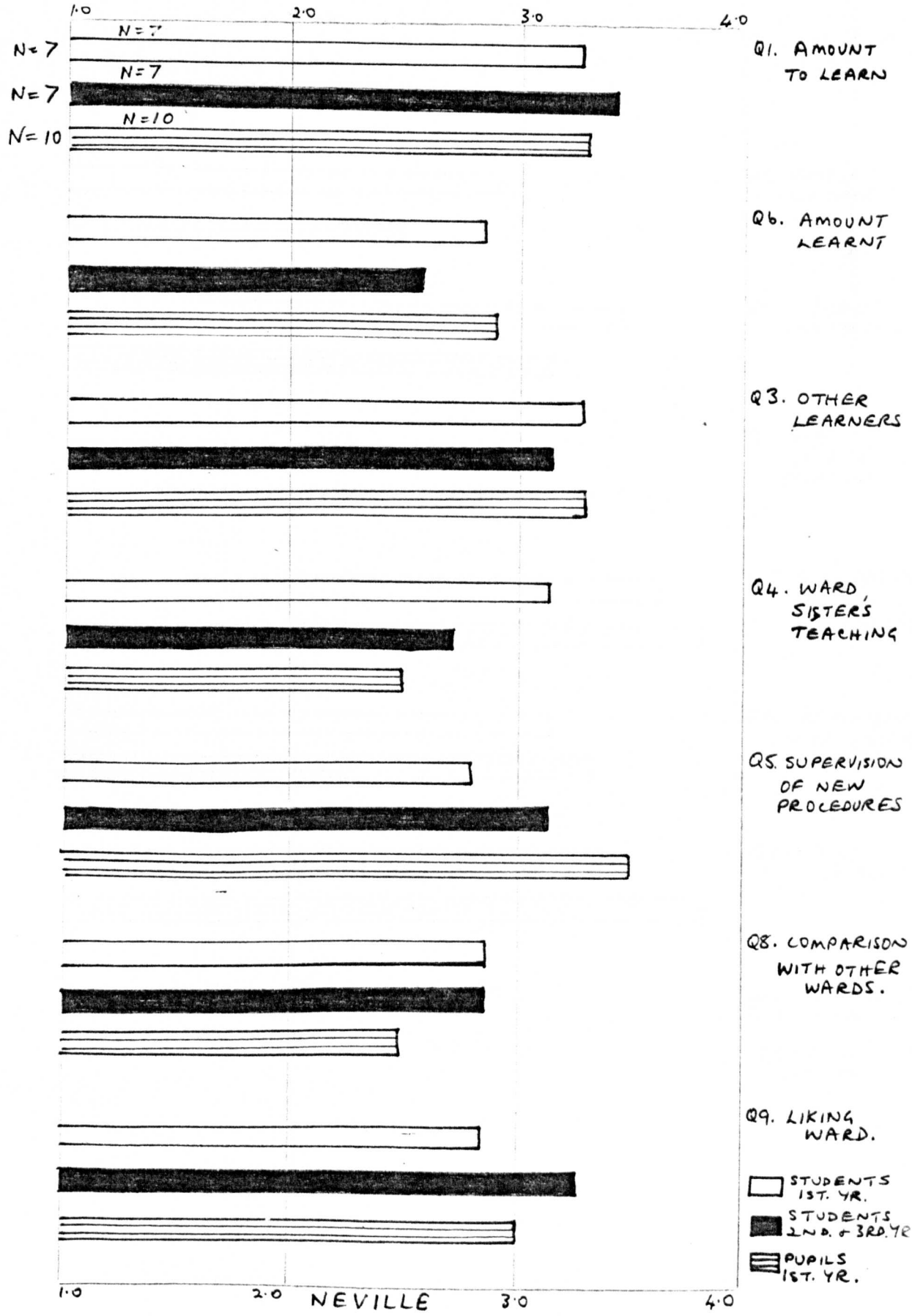

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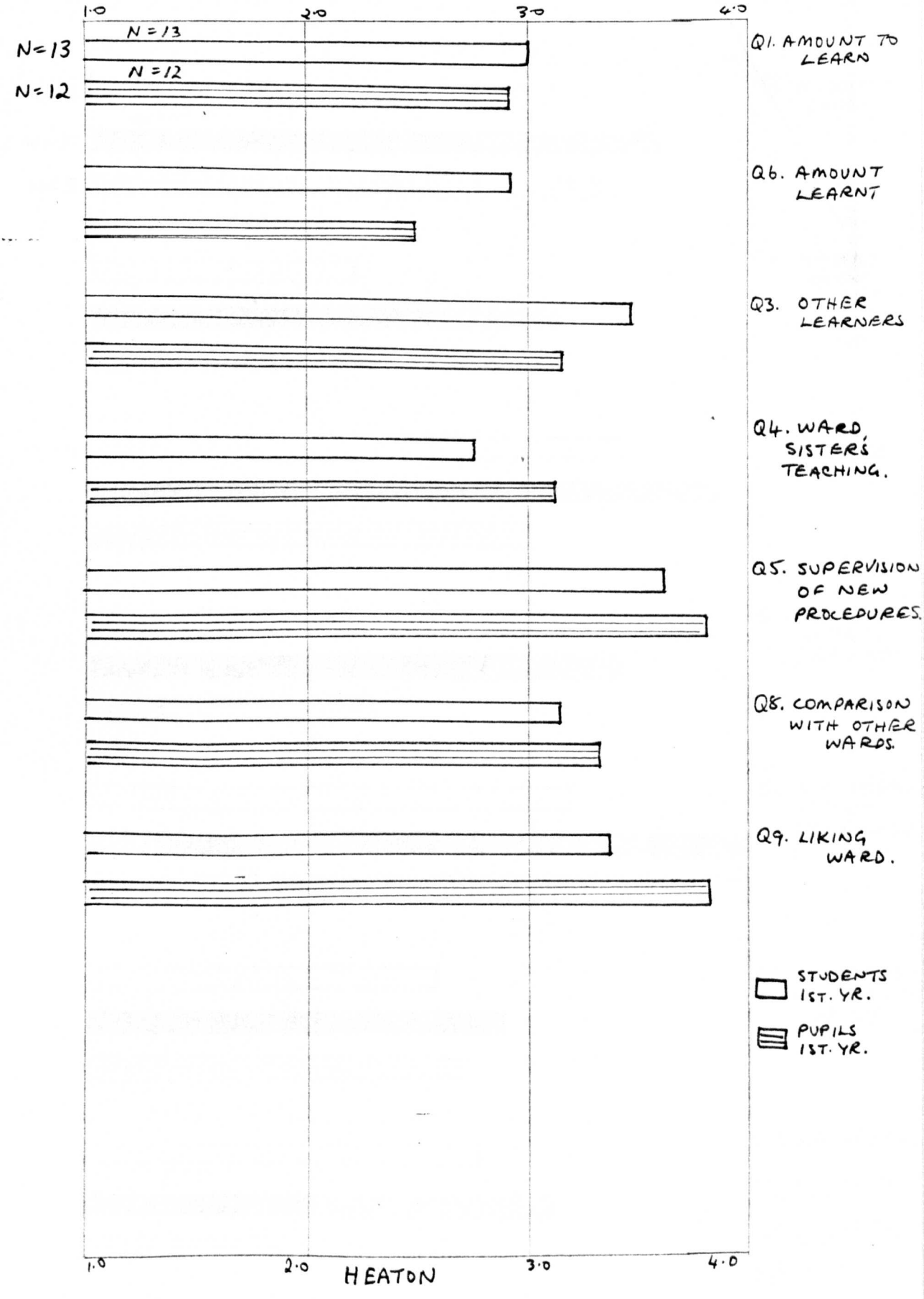

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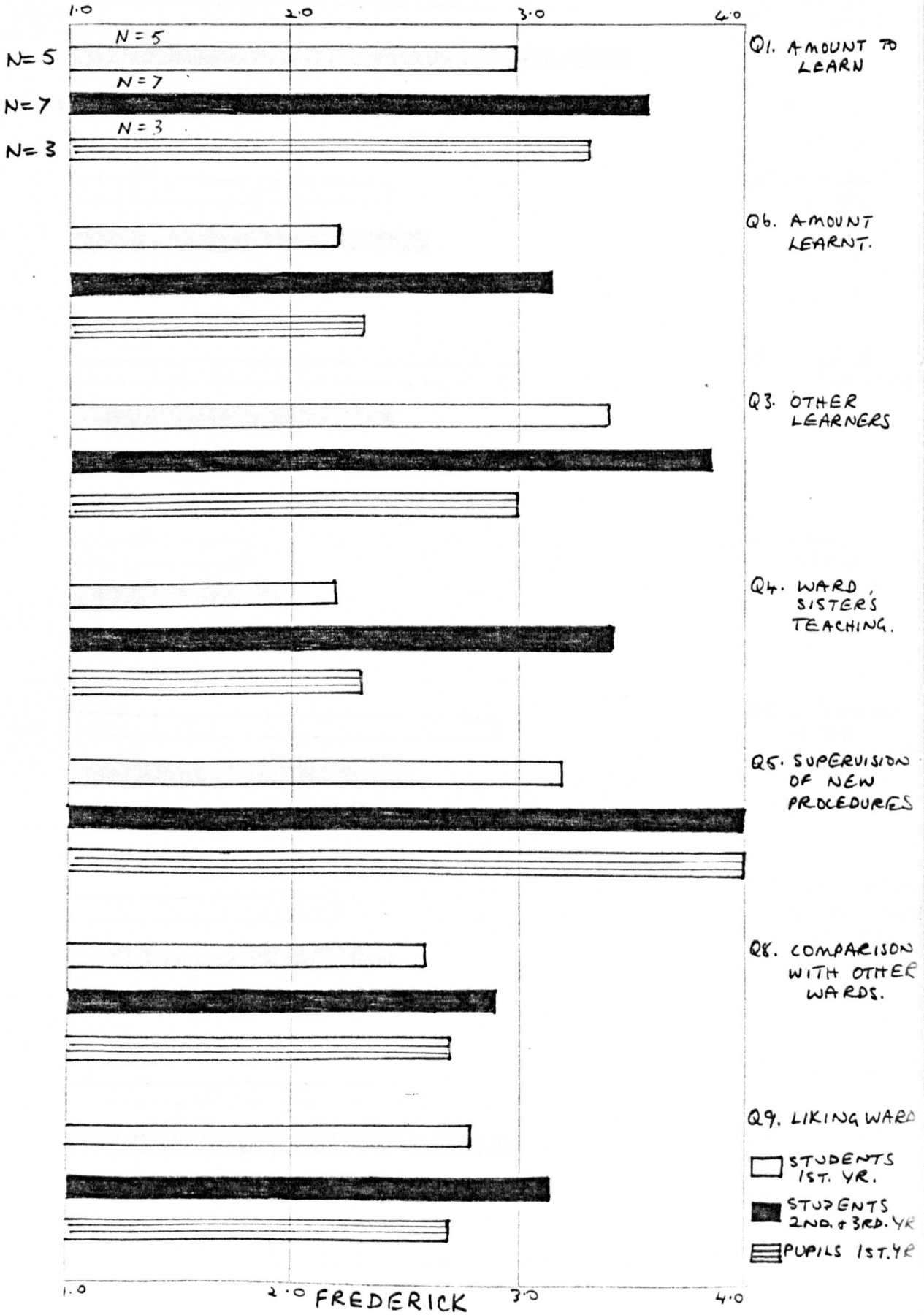

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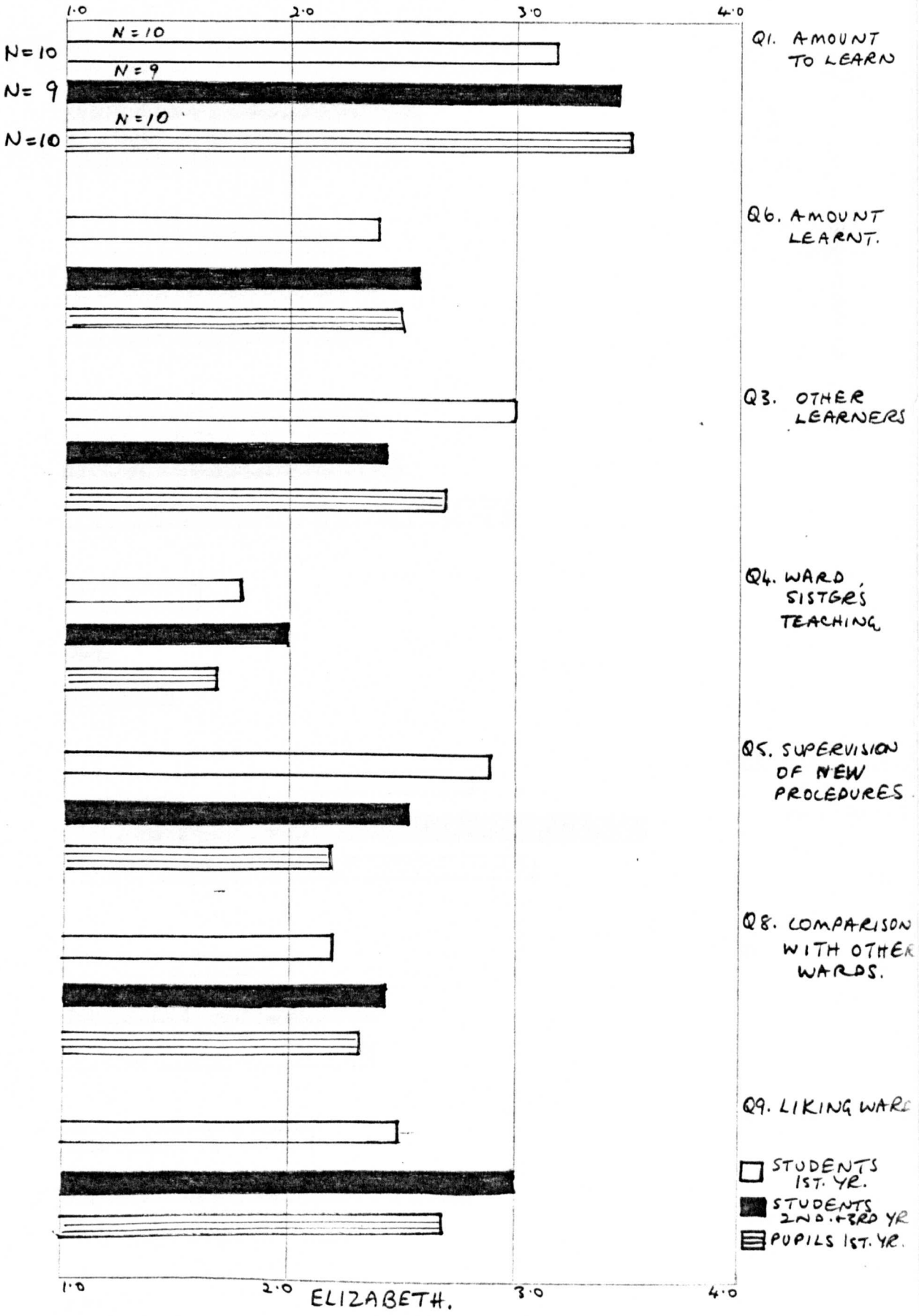

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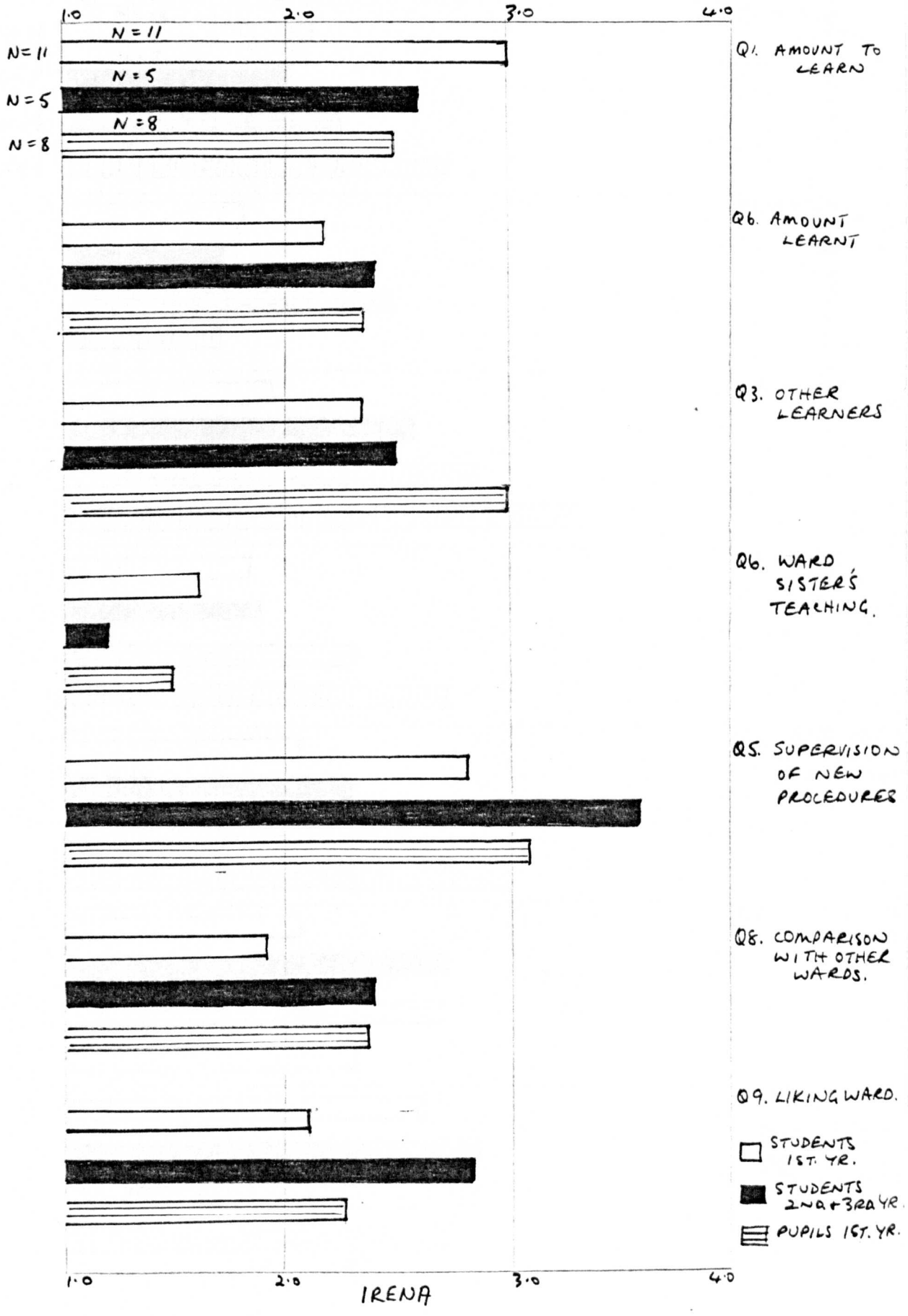

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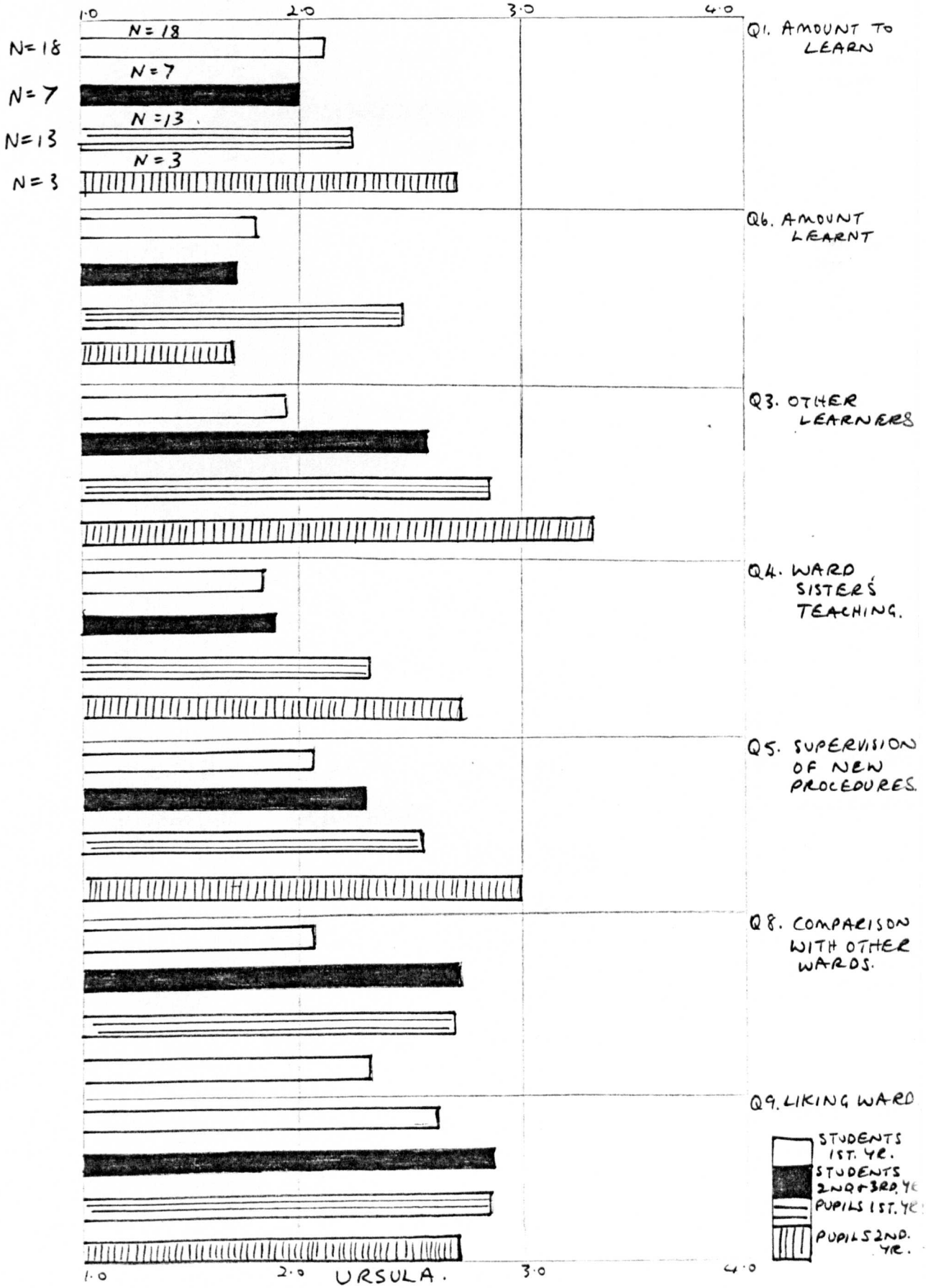

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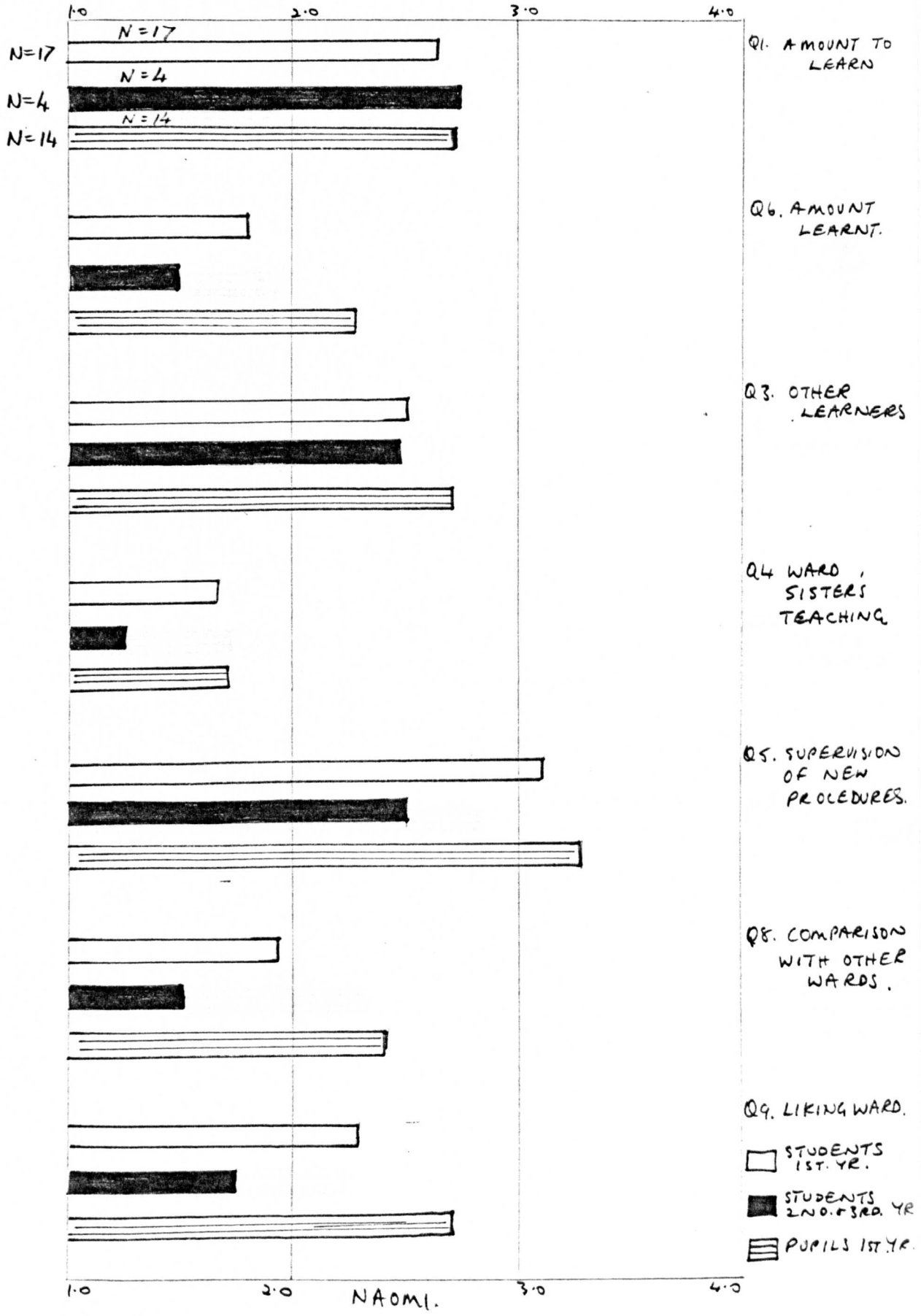

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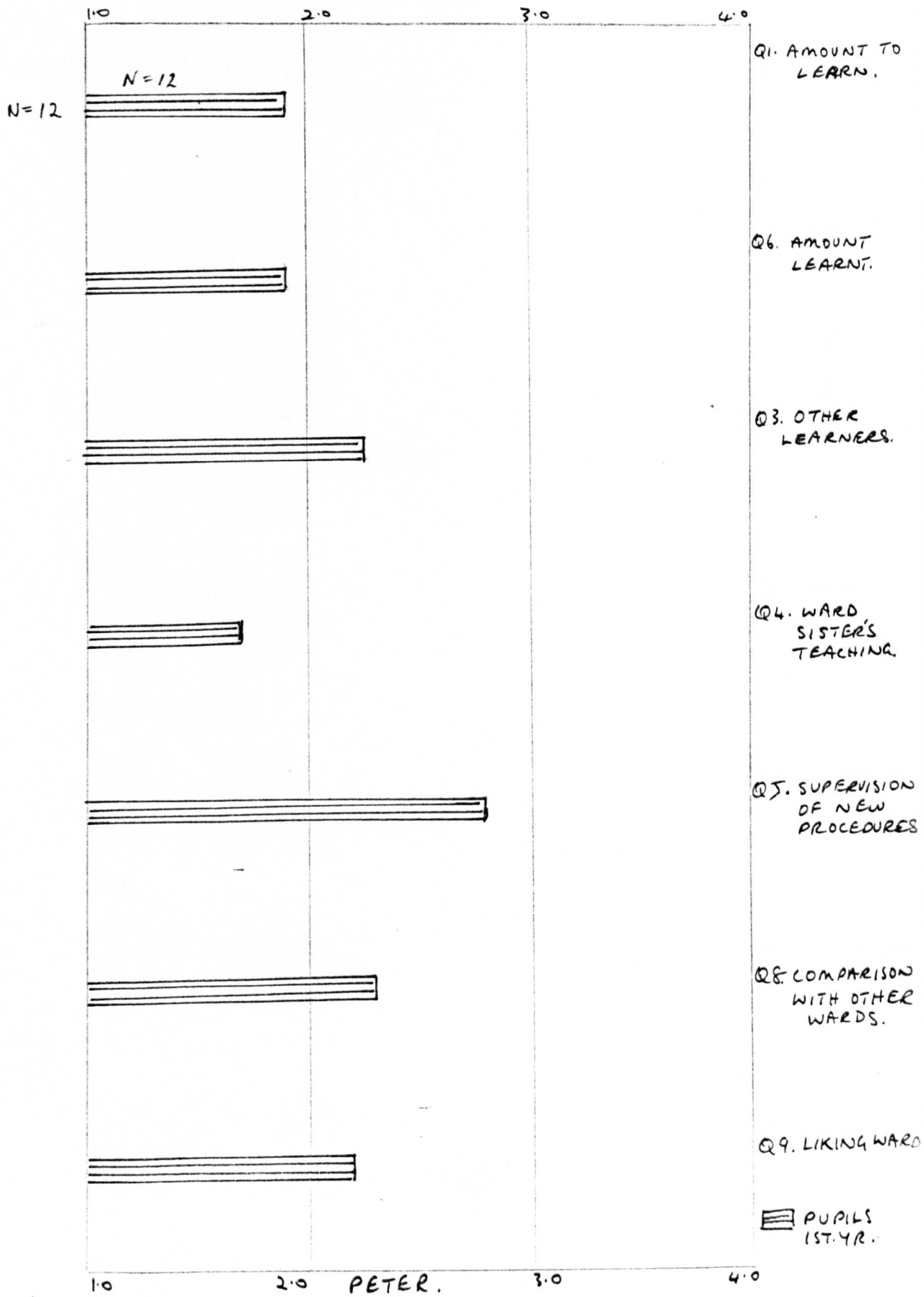

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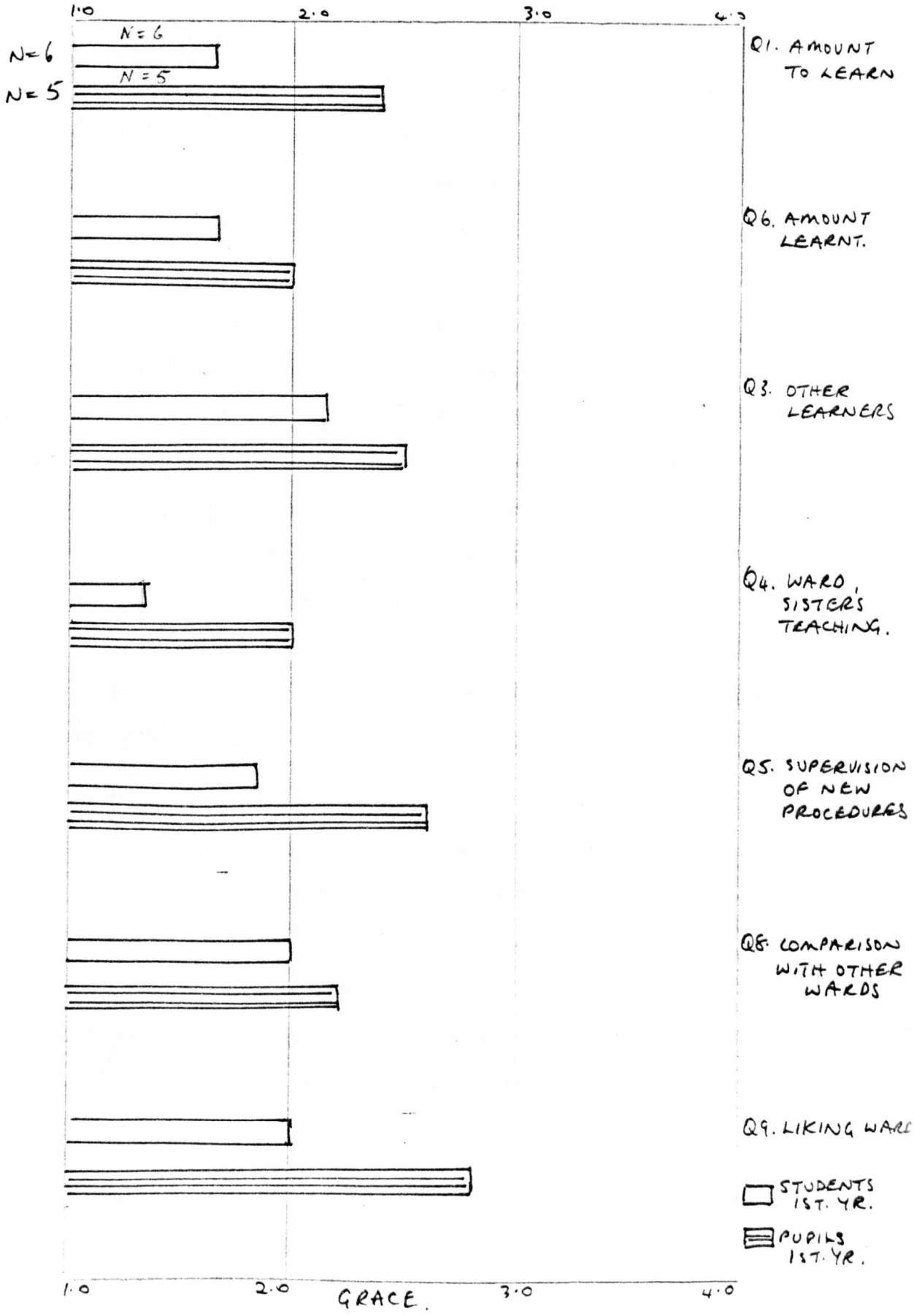

APPENDIX 6.

ANALYSIS OF NURSES' COMMENTS

(Ward samples constant throughout analysis)

Learners were asked to comment on anything which was regarded as 'good' or 'Not so good' for learning, in respect of each ward for which they completed a rating questionnaire. It was left to the individual to comment as she wished. Thus some nurses made only brief comments.

"Teaching very good. Encouragement to watch given.

Lectures given. Interesting."

Others would range over several topics in more detail:

"This ward was very good for learning on. I found I was helped a lot both by the sisters, SRNs and clinical tutors. I was guided for as much as I needed but was not overpowered by authority all the time. A staff nurse or clinical tutor nearly always gave a lecture in the afternoon on a particular patient or other which I found helpful when relating to an illness. I learnt a lot by my mistakes on this ward whereas on other wards I was left alone most of the time and did not know whether I was correct or incorrect in what I did."

The comments for different wards varied considerably and could cover a different series of topics. Therefore, a decision was made to identify first of all, the teachers in the different wards, and then to categorise comments into 12 broad areas which emerged as comments from succeeding groups of learners were written out on 5" x 3" cards and sorted. In the final stages 28 categories were selected to allow both favourable and unfavourable comments in an area to be identified.

In order to assist the reader in the interpretation of tables, these categories are listed and examples of comments from each category given.

Code 2 - Heavy workload/staff shortage.

"Not enough nursing staff for size of ward."

"Staff was very short on this ward - it was hectic".

"There was never enough staff for the amount of work to be done."

Code 2b - Heavy workload/staff shortage, therefore no time for teaching or learning (sub category of 2).

"Too many patients, not enough qualified nurses to teach and very often there is little or no time to learn."

"We needed time to look at notes, maybe a lecture, but there was little time for this as it was such a busy ward."

"Owing to the almost continual frantic pace of the ward, there was little time for actual teaching."

Code 3 - Non job teaching given.

"We had lectures and questionnaires to answer most afternoons. If someone had an unusual complaint, sister would explain it to you."

"I found it very helpful at visiting time. We were allowed to go into the treatment room and have tests on different things in the ward or we could discuss one particular patient and his treatment."

"The sister was very good and taught me a lot on surgery, drugs, procedures, etc."

Code 4 - Job teaching given.

"Many procedures were difficult, but with lots of explanation I found them easy."

"There was always someone senior in charge to show or tell you what to do. Both of the sisters were very interested in the nurses' progress and instead of just telling you that you were doing things wrong, they showed you the right way to do things."

"Third year students showed junior students new procedures, which in my case helped a lot, as one felt better able to question other students rather than qualified staff."

Code 5a - Spare time available - not used for teaching or learning.

"Every afternoon the 'first years' would be sent into the linen room to tidy, or to defrost the fridge. Sometimes we were more like office girls, making out notes, up and downstairs getting notes."

"Too much emphasis on cleaning when a lecture could have been given."

"A lot of spare time in the afternoon which could have been used for giving lectures."

"There was plenty to learn and many qualified staff - the slack periods were not used to their full advantage."

Code 5b - Available time not wasted. Opportunity to learn, or teaching given.

"One of the sisters gives lectures if she has time."

"The ward sister taught us a lot at every free time."

"Afternoon breaks used for teaching."

"During visiting hours all the nurses sat around a table in the middle of the ward to study - invariably a staff nurse would lead the studying often with the kardex discussing patients."

"I found that the SEN taught me a great deal. Even though it was extremely busy there was always time for a teaching session."

(Difficulty was experienced in defining the limits of the above categories - 5a and 5b. Initially an attempt was made to distinguish between wards which were very busy but in which there was still time to teach, and those where there was plenty of free time which was not used for teaching. However, this was abandoned as dividing lines were often hazy.)

Code 6 - Teaching infrequent or inadequate/no interest in teaching learners.

"Could do with more teaching sessions."

"There was immense knowledge to be learnt on this ward. Though the amount taught was inadequate."

"There was not enough teaching done on this ward. There were a lot of interesting things to be learnt, e.g..... but there were never any lectures or teaching sessions."

"I enjoyed working with these patients but I learnt nothing beneficial on this ward." (This was the sole comment. It implies inadequate teaching and was, therefore, included in this category.)

"You had to find things and do things to the best of your ability."

"The only thing which I disapproved of was the way you were just given an injection to draw up and give it, you were nearly always left entirely on your own and no-one checked that you drew up the correct amount. If it was a DDA you just signed the book and went and gave it." (Pupil on first ward).

"I don't think the staff were particularly interested in teaching the junior staff much."

(NB - This category does not include learners who indicate

a. that there is no teaching due to heavy workload, or

b. that available time is not used for teaching/learning.

In other words, the three categories are mutually exclusive.

Code 7 - Responsibility given.

"The sister on this ward believed in making nurses think for themselves. She didn't write a work list but expected the work to be done. I think she got the best out of most nurses."

"You were given the same responsibility and were expected to know the same things as the students in the way of nursing care and post-operative treatments."

"The sisters were very helpful and you felt they could trust you."

"I think students learnt because they took charge of the ward often."

"I started to gain confidence because I was often left to do things and help junior students." (First year nurse).

Code 8 - No responsibility given.

"One was not given the chance to feel confident and to use one's initiative. Thus I did not feel as if I had gained anything during my time there."

"Initially one felt to have no degree of responsibility at all."

"The auxiliaries were trusted more than the first year nurses. My responsibilities on this ward were NIL."

"Not given the chance to do or practise your nursing procedures which I think is degrading on the part of first year learners. How could you learn if not given the privilege by authority?"

Code 9 - Ward well organised.

"A very well organised ward."

"It was a well run ward."

"Good ideal ward to work in. One knows what is going on all the time. Good communication between sisters and juniors."

"This ward was run smoothly and efficiently."

Code 10 - Ward not well organised.

"It was a rather disorganised ward when I compare it with others."

"The daily work routine was changed from time to time for no apparent reason. Things seemed quite muddly."

"At times I felt that the ward itself lacked proper management and it seemed like a mad-house."

"There was hardly any staff on in the morning and evening. The linen was very short."

Code 11 - Good staff relationships/ward atmosphere.

"Atmosphere is good to work in; happy but with pressure in it".

"The staff were very pleasant yet strict at the same time. I think this influenced the interest I had on the ward."

"The ward sister was very fair. It was a pleasure to work for her."

"It really was one of the best wards I have worked on because the atmosphere was free and relaxed."

"The atmosphere was very good and stimulated your interest in the patients."

Code 12 - Poor staff relationships/ward atmosphere.

"The sister was too strict. There was no communication between her and certain learners. I think she is prejudiced."

"The SEN screamed at the nurses all the time, especially first year nurses. She is too demanding."

"The sister was unapproachable."

"Not a very relaxed atmosphere."

"The reason I didn't like working on this ward was because of the staff but apart from that it was alright. As a result of the tension of the ward I lost confidence in myself. The staff was very critical and it put me off....."

"Also there was in my opinion, too many trained staff which caused an atmosphere as they all wanted to be in charge."

"I did not like this ward. I did not like the cattyness and childish ways of some of the qualified nurses and the kitchen maid."

"All the cattyness and bitchiness definitely must have affected me working in quite a lot of ways and I seriously thought that I should never have started nursing in the first place."

"I didn't learn because I was afraid to ask."

Code 13 - Opportunity to watch/perform a variety of jobs given.

"One had a chance of doing procedures one hadn't done before".

"When any new procedures were undertaken, students were always given the opportunity to watch and help if they wanted to."

"I like the system that everyone was given freedom of what to do

especially when you already know it theoretically but want to practise it like giving injections and preparing patients for theatre and doing dressings and so many other things."

Code 14 - Opportunity to watch/perform a variety of jobs not given.

"It would help if the learners were taken on the drug round by senior staff more often."

"They seem to think it was our duty just to fetch bedpans and do pressure areas."

"There was a lot to learn on this ward if you had the time as you were usually kept busy and the senior staff did most of the responsible work and you didn't have time to watch."

"The thing I didn't like was that you always seemed to be doing the same things, i.e. bedpans, etc., whilst the senior nurses had more variety - I would have liked more variety."

Code 15a - Dissatisfaction with patient care. Within the control of the Ward staff. (i.e. physical care or attitude towards the patient.)

"The nurses were kept busy and there was not as much time as we would like to spend talking to the patients and getting them interested in life once again."

"I found the nursing care was poor. My impression was that they are slapdash and although very busy I feel that there are certain things one has to find time to do for the sake of the patient and to cut down the risk of infection."

"Hygiene standards were extremely poor."

"Not enough was done to interest the patients. When ideas were suggested by the students of ways to improve things, there was always some reason why it could not be done."

Code 15b - Dissatisfaction with patient care. Facilities outside the control of the ward staff.

"Not enough equipment to do proper nursing."

"Conditions for the patients were not to my liking."

"No occupational therapy."

"It was far too crowded.... not sufficient space for work to be carried out."

Code 16 - Satisfaction with patient care.

"The sister really made sure all her patients got the best attention and nursing care, and that practical procedures were done properly."

"No bad points at all. All in all a super ward for staff and patients."

"Sister is dedicated towards the patients and nursing staff."

"Good nursing care."

"I liked working on this ward because the elderly people were treated like people not patients."

"Tender loving care and personal contact was encouraged."

Code 17 - Work interesting/variety of work and learning experiences/ new field.

"There is so much to learn because it is a new field."

"It was a very interesting, busy ward."

"I like to work in a surgical ward because I have so much to learn from the ward. Moreover, I do not have to nurse the same patient over a long period."

Code 18 - Work monotonous/boring/repetitive/basic nursing/not interesting.

"The same routine every day. I really got bored and sometimes depressed at the thought of having to go there."

"I did not learn much as the work was repetitive and there were few new procedures to learn."

"It was a very good ward to begin training as there was a lot of basic nursing involved." (Basic nursing in favourable context. See Table 6, Appendix 6).

"The majority were geriatrics so on the whole it was just basic nursing."

"X is not a busy ward but found to be not interesting because you wanted to be busy. Not much to learn because the diagnosis is monotonous."

Code 21 - Allowed on doctors' rounds.

"We always went on the consultant's rounds and he explained the operations to the nurses."

"On consultants' rounds all the students attended but they were not directly for students of nursing but for medical students only. The ward stood still whilst the round took place."

"It was useful to be allowed on doctors' rounds, although we were never spoken to or asked questions."

(NB - It is obvious that the first comment is of a more favourable nature than the other two, but there were not sufficient comments to make another category. The tabulations of this category - Table 6 - are misleading and the readers are referred to the specific question on consultants in the rating questionnaire.)

Code 20 - Not allowed on doctors' rounds.

"Being a busy ward the junior nurses never had the chance to go around with the doctors or consultants' rounds."

"The consultants on this ward thought they were gods. You were never allowed on a ward round, only the sister. They didn't teach you anything."

"It would be better if doctors and consultants spent time with nurses on ward rounds or were able to give lectures."

Code 23 - Learner able to initiate and facilitate own learning.

"All the students had the freedom to practise what they had learnt in the school."

"I learnt a lot because my eagerness to learn encouraged me to do so."

"If I acted interested then the staff were interested in me. I think if you really are interested you can learn a lot."

"I enjoyed this ward because personally I like old people and I know a lot don't and this shows in their stay. But I did learn a lot."

Code 24 - Conflict between teaching in school and ward.

"The sister had very old fashioned views - some good, some bad."

"The sister was very keen to teach her own individual way of nursing developed through years of experience although they did not always coincide with textbook theories."

Code 25 - Questions rejected or discouraged.

"They seemed to think that you should know everything and that you shouldn't ask them."

"If you asked a question of certain staff they laughed at you."

Code 26 - Questions answered.

"At any time you could go to the sister and ask about a particular case."

"If there was anything you wanted to know about, the doctors were always willing to help."

"The medical staff could be helpful if questioned."

"The staff were always prepared to answer any question put forward."

"The sister is willing to teach you if you ask."

Code 19 and code 22 are Miscellaneous favourable and unfavourable respectively

APPENDIX 6 (cont)

ANALYSIS OF NURSES' COMMENTS

Appendix of Tables

Table 1 - Staff members who taught or were willing to teach (expressed as percentages).

	Ward Rating													
	High										Low			
Wards	CH	WE	WI	ME	SI	NE	HE	FR	EL	IT	UR	NA	PE	GR
N=	25	16	24	6	30	24	27	15	30	25	41	36	15	13
Everyone/qualified staff (sister and SRN/SEN)	44	25	25	67	30	33	37 (4)	47	6	16	7	22	7 (7)	0
Sister (senior)	31	36	54	50	20	33	67 (4)	20	23 (3)	4 (4)	17 (2)	17 (3)	0	8
Staff nurses (trained staff other than senior ward sister)	20	19	21 (4)	33	37	17	26 (7)	27	14	32	7	31	7	0
Third year students	20	0	8	0	17	0	0	0	7	4	0	3	0	0
Doctors	28	19	8 (4)	100	17	21 (4)	15	47	17	28	5	3	7 (7)	0

( ) indicate people who taught when asked. This was the only context in which teaching was mentioned.

Because of the very small sample, this is the only table in which Merton nurses' comments are included.

(Explanatory note: Some nurses did not refer to sisters and staff nurses individually but commented on 'everyone' or 'all the qualified staff' being willing to teach. In order to make the comments more comparable, the first set of figures also includes comments concerning both sisters and staff nurses/SENs.

Table 2 - Staff members who did not/were not willing to teach (percentages).

Wards	CH	WE	WI	SI	NE	HE	FR	EL	LR	UR	NA	PE	GR
N =	25	16	24	30	24	27	15	30	25	41	36	15	13
Staff	0	0	4	3	0	4	7	0	20	7	6	14	31
Sister	0	0	8	13	0	0	7	10	24	15	11	20	23
Doctors	4	6	13	10	4	4	0	7	0	0	11	13	0
Staff nurses	0	0	0	0	0	0	0	7	4	5	0	0	8

Table 3 - Comments concerning Clinical Teachers (percentages)

Wards	CH	WE	WI	SI	NE	HE	FR	EL	IR	UR	NA	PE	GR
N =	25	16	24	30	24	27	15	30	25	41	36	15	13
Clinical teachers taught in wards	24	0	13	17	29	0	0	10	7	34	11	0	8
Infrequent contact with Clinical Teachers - more needed.	4	0	4	0	0	4	0	13	4	0	16	14	8
No clinical teacher needed.	0	6	0	0	0	7	0	0	0	0	0	0	0

NURSES' COMMENTS ON WARD TEACHING

Table 4 - Percentage of nurses indicating that Job and Non Job teaching is given and that available time is used for teaching (percentages).

Ward	CH	WE	WI	SI	NE	HE	FR	EL	IR	UR	NA	PE	GR
N=	25	16	24	30	24	27	15	30	25	41	36	15	13
Non job teaching given	36	31	38	37	46	63	60	20	36	20	28	7	23
Job teaching given	36	75	25	37	33	22	20	23	12	32	17	14	31
Available time not wasted. Used for teaching/learning.	4	6	17	7	25	19	0	13	8	5	6	14	8

Table 5 - Percentage of nurses commenting unfavourably on teaching (percentages)

Ward	CH	WE	WI	SI	NE	HE	FR	EL	IR	UR	NA	PE	GR
N =	25	16	24	30	24	27	15	30	25	41	36	15	13
Heavy workload/staff shortage, therefore no time for teaching	0	0	17	0	4	4	0	33	0	5	31	0	0
Spare time available - learning opportunities missed, time not used for teaching/learning.	0	25	13	3	0	0	0	0	4	0	0	27	0
Teaching infrequent or inadequate/no interest in teaching learners.	16	13	4	13	13	15	13	27	32	17	25	34	54
Total negative comments	16	38	34	16	17	19	13	60	36	22	56	61	54

NURSES' COMMENTS ON WORK AND WARD ACTIVITIES

Table 6 - Percentage of nurses commenting on aspects of work and ward activities. (percentages)

WARD	CH	WE	WI	SI	NE	HE	FR	EL	IR	UR	NA	PE	GR
N =	25	16	24	30	24	27	15	30	25	41	36	15	13
* Heavy workload/staff shortage/too busy/ no time.	4	0	17	3	4	4	0	43	0	27	42	0	23
Work interesting/variety of work and learning experiences/new field.	33	19	33	39	46	26	20	37	16	10	17	14	8
Work monotonous/boring/ repetitive/basic nursing.	0	0	0	0	0	11	7	0	8	34	25	27	62
Basic nursing mentioned in favourable context ( )									(4)	(7)	(8)	0	(15
Ward well organised	20	25	25	33	21	48	13	17	16	5	3	7	15
Ward not well organised	0	6	8	0	4	0	0	27	0	0	19	0	0
Opportunity to watch/ perform a variety of jobs given	12	0	13	10	8	15	7	10	8	7	6	7	0
No opportunity to watch/ perform a variety of jobs.	4	6	4	17	4	4	27	10	12	0	3	14	0
Learners able to facilitate and initiate own learning.	4	6	4	17	8	4	0	20	4	2	8	0	8
Allowed on doctors' rounds	12	0	0	0	8	19	7	0	8	5	3	0	0
Not allowed on doctors' rounds	0	6	13	7	0	0	0	3	0	0	8	0	0

* NB includes comments under 'heavy workload/no time for teaching', shown in Table 5.

Table 7

Nurses' comments on patient care, responsibility, staff relationships, and ward atmosphere. (percentages)

WARD	CH	WE	WI	SI	NE	HE	FR	EL	IR	UR	NA	PE	GR
N =	25	16	24	30	24	27	15	30	25	41	36	15	13
Satisfaction with patient care	8	19	8	10	0	11	20	3	0	15	3	14	15
Dissatisfaction with patient care (within the control of ward staff)	0	6	0	3	8	4	7	13	0	30	6	0	15
Dissatisfaction with patient care (facilities outside the control of ward staff)	0	0	4	4	0	0	0	7	0	22	0	0	8
Responsibility given	28	13	4	13	0	4	20	20	4	17	3	0	0
No responsibility given	4	19	4	3	0	0	0	0	0	2	0	27	0
Good staff relationships/ ward atmosphere	33	6	21	24	46	59	40	20	12	29	14	17	23
Poor staff relationships/ ward atmosphere	8	31	8	0	13	4	7	10	36	5	19	20	0
Conflict between teaching in school and ward			21										
Questions discouraged or rejected		6							12		6		
Questions answered	4	12	8	0	26	14	7	3	4	2	3	14	8
Miscellaneous favourable	4	13	4	3	21	26	20	3	16	17	6	20	38
Miscellaneous unfavourable	8	13	21	0	13	7	27	0	20	22	11	0	0

APPENDIX 7

PATIENT DEPENDENCY ASSESSMENT

Using continuous observation of patient care and activity sampling in a study of 6,000 hours of nursing in a variety of medical and surgical wards, similar in type to those being used in the second stage of this research, Barr and his colleagues (1967) were able to assess the average time spent in basic and technical care during a six hour period, for patients in three different care groups.

Care group 1 (self care)	10 minutes per patient
Care group 2 (intermediate care)	22 minutes per patient
Care group 3 (intensive care)	44 minutes per patient

Tested statistically, the differences between the three groups were found to be in the ratio of 1;2;5; which enabled patients in each of the care groups to be allocated a numerical score of 1, 2 or 5. The workload on the ward could, therefore, be calculated according to the number of patients in the different care groups. Barr found that there was a strong correlation between the workload index calculated in this way and the number of occupied beds, but argued that this method of calculation gave greater weight to critically ill patients.

However, since 80 per cent of patients were found to fall into the Intermediate care group, this group was divided into three groups, in order to provide a more efficient measure. The five care group system, shown in Appendix 8 was used in this study. Preliminary studies in this research confirmed that the three care groups did not discriminate adequately either between wards, or on the same ward at different times.

The workload for each ward was calculated by allocating a score to each patient, equivalent to the care group number. The workload index in each ward, therefore, reflected not only the number of patients in the ward but the type of care each was receiving.

APPENDIX 8

Patient Care Groups

Care Group 1 (Self Care)

I Patients aged 12 - 75 years of age, up at least six hours daily and recorded as:

(a) Ambulatory - Self

(b) Bathroom - Self

(c) Toilet - Self

(d) Feeding - Self

and with no other nursing indications recorded.

II Patients aged 12 - 60 years, up at least six hours daily and recorded as:

(a) Chair - Self

(b) Bathroom - Self

(c) Toilet - Self

(d) Feeding - Self

(Patients under 12 years or over 75 years and chairfast patients over 60 years are considered as being in care group 2, 3, 4 or 5).

Care Group 2 (Intermediate Care - Ambulatory)

Walks without help and up for more than 3 hours, but with nursing indications which would exclude from care group 1.

(Patients under 12 years or over 75 years or chairfast patients over 60 years if otherwise fulfilling the criteria of care group 1).

Care Group 3 (Intermediate Care - Others).

All other patients not classified as care group 1, 2, 4 or 5.

Care Group 4 (Intermediate Care - Bedfast)

Bedfast but with insufficient nursing requirements for care group 5.

Care Group 5 (Intensive Care).

Patients recorded as:

(a) Unconscious, or semi-conscious, or

(b) Requiring special nursing, or

(c) Undergoing (any three of the following six treatments, or
(any two if combined with marked confusion, or
(any two if patient is over 75 years of age.

(i) Intravenous therapy (including blood)

(ii) Suction/aspirations, etc.

(iii) Oxygen administration.

(iv) Peritoneal dialysis.

(v) Drainage - bladder, wound etc.

(vi) Respirator or monitor.

APPENDIX 9

NURSING DEPENDENCY FORM			Hospital
Patient's name (record in pencil)		Diagnosis / Operation	Ward
Age	Month		
	Day		
	Days spent in ward		
SECTION A		am pm am pm am pm am pm am pm am pm am pm am pm am pm	
Self	Bathroom		
	Toilet		
	Feeding		
Mobility	Walks without help		
	Walks with help		
	Chairfast (under 60)		
Hours up	6 hours or more		
	3 to 6 hours		
	Less than 3 hours		
	Bedfast complete		
SECTION B			
Treatment and observ-ations	Theatre		
	Major dressing		
	TPR or BP 4 hourly		
	Turn 2 hourly		
	IV Therapy		
	Suction		
	Oxygen administration		
	Blood transfusion		
	Drainage		
	Special nursing		
Mental state	Semi or unconscious		
	Marked confusion		
	OFFICE USE		

APPENDIX 10

INSTRUCTIONS FOR COMPLETION OF NURSING DEPENDENCY FORM

The information recorded on the form is used to allocate patients to one of five care groups. The criteria for allocation to each group is shown on the attached sheet. Previous studies by Barr in the Oxford Region have shown that patients in care groups 1, 2 and 5, receive basic and technical nursing care, in the ratio 1:2:5. (i.e. a patient in care group 5 receives approximately five times more nursing care than a patient in care group 1). It is thus possible to make an unbiased assessment of the workload of a ward, by allocating each patient to a care group and calculating a work load index.

The form should be completed between 12 noon and 2 p.m. It is realised that the completion of up to 35 forms could add 10 to 15 minutes to your workload but your help in obtaining an accurate assessment of the work load will be very much appreciated.

Recording the information

Section A. Self — Record X if the patient is able to bath unaided, go to toilet unaided, or feed himself.

For each item, if assistance is required LEAVE BLANK

Mobility — Record ONE cross if applicable.

Hours up — Record ONE cross in this section. Covers period 8 a.m. to 8 a.m.

Section B. Theatre — Record X if patient is for theatre or anaesthetic today. Place cross in either a.m. or p.m. column.

All Other Items — Record X if patient is undergoing these items of treatment either continuously or intermittently.

Section B (cont...

Mental State — Record X if patient is semi or unconscious, or if patient's mental state causes increased demand on nursing time.

Discharges and admissions — No form needs to be filled in for patients discharged during the morning. Complete form for patients admitted before 2 p.m.

Days spent in ward — Day of admission to count as day 1.

APPENDIX 11

CALCULATION OF THE WORKLOAD PER NURSE PER HOUR

At the commencement of each observation session, the names of staff members were listed and the total number of hours spent actually working on the ward were subsequently recorded at the end of the period. Time spent off the ward for coffee breaks or on duties that were not connected with the ward were excluded. The total number of hours worked by all members of the nursing staff (sisters, staff nurses, S.E.N.'s learners and auxiliaries) was calculated, and the mean number of nurses per hour calculated by dividing by the number of observation hours (i.e. 3 hours for the morning and 2 hours for the afternoon). This differed from the method of Lelean (1973) who always observed for the same length of time and could, therefore, compare wards without this additional calculation.

Example from main study (observation period 9 a.m. to 12 noon)

Nurse hours.

Grade	Hours worked.
Sister	3
Staff nurse	3
Staff nurse	3
Student	2.66
Student	2.66
Pupil	2.66
Auxiliary	0.5
Total hours worked:	17.48

Nurses per hour 17.48 ÷ 3 = 5.83.

Workload

Care group.	No. patients.	Score.	Total Score.	
1	4	1	4	
2	2	2	4	
3	8	3	24	
4	3	4	12	
5	3	5	15	
	20		59	Workload Index

$$\text{Workload per nurse per hour} = \frac{\text{Workload Index}}{\text{Nurses per hour}} = \frac{59}{5.83} = 10.12$$

APPENDIX 11 (cont)

DAILY RECORD OF STAFF AND WORK LOAD

WARD DATE

STAFF ON DUTY	9am to 12noon TIME ON WARD WORK (ex meals)	2pm to 4pm TIME ON WARD WORK
TOTAL NURSE HOURS		

WARD CLERK

WORK LOAD

CARE GROUP	9am to 12noon NUMBER OF PATIENTS	SCORE	2pm to 4pm NUMBER OF PATIENTS	SCORE
1				
2				
3				
4				
5				
TOTAL				
	WORK LOAD INDEX		WORK LOAD INDEX	
	NURSES PER HOUR		NURSES PER HOUR	
	WORK LOAD PER NURSE PER HOUR		WORK LOAD PER NURSE PER HOUR	

APPENDIX 12

OBSERVATION SCHEDULE

1. One nursing dependency form per patient to be provided.
2. Record staff on duty and enter code initials on daily record and activity sheets.
3. Ensure following are on clip board: - Activity codes.
   Activity sheets.
   Learner activity sheets.
   Scale card.
4. Commence observations at 9 a.m. or 2 p.m. as appropriate.

Method of recording data

1. Locate Senior ward sister and record: Activity (2 codes)
   With whom
   Overt teaching (OT)
2. Locate other permanent trained staff and record:
   Activity
   With whom
   Overt teaching (OT)
3. Record who each learner is with.
4. Taking each learner in rotation record more details on 'Learner activity' sheet. Order of priority is as follows:
   i. First learner encountered in 'overt teaching' situation.
   ii. If no overt teaching, take first learner on rota who is not alone (i.e. who is working with someone else and is therefore in a 'teaching by example' situation). Take first one encountered with a member of trained staff, failing that, take nurse working with another person.
   iii. If the activity is already the subject of further enquiry (i.e. has already been recorded on the 'learner activity' sheet, go to the next learner on the rota.
   iv. If learners are all working alone select a sole learner

iv..... (who could possibly be in a learning situation). This should only be undertaken if interviews which follow observations allow.

NB - It will help to remember the objectives of this method of data collection - i.e. to gather data on the teaching (either overt or 'by example') to find out whether it is built into the routine and to discover what type of teaching is going on and who initiates it. Interviews subsequent to observation must therefore take priority over observation of lone learners.

5. Interview the learner as soon after the observation as possible. This will depend, to a great extent, on the ward and learner workload. Under no circumstances should the learner be prevented from carrying out pressing nursing duties. If necessary wait until after observation sessions.

APPENDIX 13

CATEGORIES OF ACTIVITIES

Code		Inman Sister Code.
1.	Making beds. Tidying beds.	6. Assisting patients.
2.	Any hygiene to patient in bed.	
3.	Any hygiene to patient in bathroom or toilet.	
4.	Getting patient up, putting back to bed, assisting patient.	
5.	Pressure areas.	
6.	Food, drink, filling in diet sheets.	
7.	Weighing patient.	
8.	Fetching/removing bed pan/urinal.	
9.	Washing hands.	
10.	In sluice.	
11.	In kitchen.	
12.	In linen cupboard.	
	Technical	
13.	Admission, discharge.	6. Assisting patients.
14.	Any nursing procedure.	
15.	Aseptic procedure.	
16.	Pre and post operative care.	
17.	T.P.R. and B.P.	
18.	I.V.	
19.	Injections.	
20.	Escorting patient out of ward.	
21.	Medical procedure.	
22.	Charting.	
23.	Urine testing.	
24.	Dealing with specimens.	
25.	Drugs/medicines.	3. Medicine round.
26.	Doctors round.	1. Rounds/talking to doctors
27.	In clinical room.	

Informational

28.	Reading/writing reports; giving/ receiving job instruction.	4. Instructions/other talk to nurses/other staff, or
29.	Teaching session (not job related).	2. Kardex, files, office work
30.	Talking to any professional re job.	1. Doctors. 4. Other staff.
31.	Phone	7. Talking on telephone.
32.	Reading Kardex/work book.	2. Working on Kardex, files, case notes, office work.
33.	In office.	

Relational

34.	Communicating with patient - not part of job.	5. Talking to patients.
35.	Communicating with relative/visitor.	
36.	Talking to professional - not part of job.	1. Doctors. 4. Other staff.

Non-Nursing

37. Cleaning.
38. Moving furniture.
39. Stores.
40. Clerical (not patients' records)
41. Messages.
42. Flowers.

Other

43. Meals (own)
44. Off ward.
45. Waiting.

APPENDIX 14.

DATE
WARD
DAY

STAFF ACTIVITY SHEET

MORNING
AFTERNOON

STAFF CODE	00	10	20	30	40	50	00	10	20	30	40	50
Sen S. Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Cons.												
Docs.												
T. CT. NO.												
Ls. rota.												

APPENDIX 15

ACTIVITY SHEET

ACTIVITY NUMBER

DATE DAY	HOSPITAL CODE	
TIME	WARD CODE	
NURSE NUMBER	SESSION Morning Afternoon	
TIME ON WARD	DESCRIPTION OF HELPMATE / TEACHER	Alone SenS JunS SN SEN
TRAINING STAGE First ward Yr1 Yr2 Yr3		St1 St2 St3 Pp1 Pp2
ACTIVITY CATEGORY		Ax CT D Other

DESCRIPTION OF ACTIVITY

PATIENT'S INITIALS	DISEASE	
AGE BED POSITION	SPECIAL TREATMENT	
OVERT TEACHING Yes No	OVERT JOB TEACHING Yes No	POTENTIAL TBE Yes No

LEARNER INTERVIEW CONCERNING ACTIVITY (Probe - Reason for doing job Teaching initiator)	TEACHING INITIATOR SenS L JunS SN SEN St Pp Pt Ax T CT D NO Other
How often are you involved in this type or activity?	Very often Quite often Not very often
Were you <u>told</u>, or did you <u>do</u>, or <u>see</u> anything that you feel was important for your education as a nurse?	Learning by doing Job 'how' Job 'why' Nursing theory Attitudes Social background Other

<u>WORK ACTIVITY ONLY</u> LEARNER'S ASSESSMENT OF OWN ABILITY	SCALE 1 2 3 4	COMMENTS (Probe reason for scale choice)

TEACHER INTERVIEW CONCERNING ACTIVITY
TEACHER (Probe - Whether routine activity, frequency, initiator

APPENDIX 16

QUESTIONNAIRE ON QUESTIONS

OFFICE U

WARD

NURSE NUMBER.....

The following short questions seek your opinion on who you question when you want to find out about nursing skills and knowledge. Your co-operation will be very much appreciated and all answers will be treated in the strictest confidence.

1. Who, on this ward, do you usually ask when you want to find out how to do a particular job? (Please ring to denote your answer e.g. (SEN))

   CONSULTANT DOCTOR SISTER STAFF NURSE SEN AUXILIARY

   STUDENT PUPIL SOMEONE ELSE.....

   Why do you usually ask this person (these persons) ?

2. Who, on this ward, do you usually ask when you want to find out why a job is done in a particular way?

   CONSULTANT DOCTOR SISTER STAFF NURSE SEN AUXILIARY

   STUDENT PUPIL SOMEONE ELSE.....

   Why do you usually ask this person (these persons) ?

3. Who, on this ward, do you usually ask if you want to find out about the disease a patient may be suffering from,or some other aspect of nursing theory?

   CONSULTANT DOCTOR SISTER STAFF NURSE SEN AUXILIARY

   STUDENT PUPIL SOMEONE ELSE.....

   Why do you usually ask this person (these persons) ?

4. Who do you not usually question?
   Why do you not usually question this person (these persons) ?

APPENDIX 17

QUESTIONNAIRE TO ASSESS TYPICALITY OF STUDENT/PUPIL ACTIVITIES

WARD MORNING / AFTERNOON
DATE
NURSE
STAGE OF TRAINING 1st ward 1st yr 2nd yr 3rd yr
LENGTH OF TIME ON WARD

During the morning / afternoon, several recordings have been made about the work on the ward. As far as you are concerned , has this been a fairly typical morning / afternoon?

YES NO UNSURE

For instance, have there been any marked variations in the following?

1. The routine for this day of the week. YES NO UNSURE
2. The work to be done. YES NO UNSURE
3. The work you have done. YES NO UNSURE
4. The people you have worked with. YES NO UNSURE
5. The staffing. YES NO UNSURE

Comments.

Have you done or seen anything that you don't often have the opportunity of doing or seeing?

APPENDIX 18

QUESTIONNAIRE TO ASSESS TYPICALITY OF TRAINED NURSE ACTIVITIES

WARD

DATE MORNING AFTERNOON

CODE Ward sister Staff nurse SEN Auxiliary

During the morning / afternoon, several recordings have been made about the work on the ward.

As far as you are concerned, has this been a fairly typical ..... morning / afternoon? YES NO

If 'NO'
In what way has it varied?

Have there been any marked variations in the following?

1. The routine for this day of the week. YES NO UNSURE
2. The work to be done. YES NO UNSURE
3. The work you have done. YES NO UNSURE
4. The people you have worked with. YES NO UNSURE
5. The staffing. YES NO UNSURE

Comments.

APPENDIX 19.

METHOD OF SAMPLING LEARNER ACTIVITIES

Denzin (1970) states that "it is incumbent on the participant observer to demonstrate that the case(s) he studies are representative of the class of units to which generalizations are made". (p. 200). The purpose of this appendix is to show how the sample of learner activities related to ward activities as a whole.

The method of sampling learner activities was intended to explore in depth the maximum number of overt teaching situations (regardless of the status of the teacher) and in the event of there being no overt teaching, the maximum number of situations in which teaching was likely to occur. Priority was given to those activities involving learners working with other trained persons, such as doctors, sisters or staff nurses, (referred to as 'potential teaching situations'). Where neither of these two types of activity was present, activities involving learners working with other untrained persons were sampled. In a group situation, the learner who was interviewed, was selected according to her place on a rota.

Since data from these learners activities were used to compare the teaching and learning in wards, it is important for the reader to be aware of the result of this method of sampling. Scrutiny of the ten minute activity recording sheets (Appendix 14) for the six wards has shown that between 64 and 74 per cent of all types of learner/trained staff activities (basic, technical, informational and relational) observed at ten minute intervals, were included in the sample of learner activities. (Table 1). (e.g. on Neville ward, in 52 out of 76 possible cases, a learner involved in an activity was interviewed to ascertain what had occurred.

TABLE 1.

PERCENTAGE OF LEARNER/TRAINED STAFF* ACTIVITIES INCLUDED IN THE SAMPLE OF LEARNER ACTIVITIES ON SIX WARDS

Ward	Number of learner/** trained staff activities.	Number in sample of learner activities.	%
Neville	76	52	68.4
Irena	56	39	69.6
Elizabeth	64	41	64.0
Charlotte	95	64	67.4
Naomi	56	39	70.0
Heaton	46	34	74.0

* ALL trained staff - i.e. sisters, trained nurses and doctors, clinical teacher.

** Learner/trained staff activities involving one or more learner s recorded at 10 minute intervals.

All overt teaching and potential teaching situations involving trained staff on every ward were included,with the exception of one to three cases per ward, where simultaneous trained staff/learner activities were occurring, and under these circumstances only one activity could be sampled. Two situations on Elizabeth ward and one on Irena involving a senior sister or member of the trained staff, serving meals with a group of learners were not sampled when they should have been. The only explanation for these omissions can be 'observer error', due to fatigue at the end of a three hour morning observation session and perhaps to a pre-conceived notion that such activities were unlikely to reveal data on teaching and learning. Apart from these errors, the percentage of activities that were not sampled, includes sampled activities, involving only one learner, lasting more than 10 minutes, and non-work, non-overt teaching activities.

A similar check of the learner/untrained staff activities revealed a 40.8 - 56.3 per cent sample of the activities of this type which were recorded on the 10 minute sampling sheets. (Table 2). In the vast majority of cases the 'untrained' were, in fact, learners.

TABLE 2

PERCENTAGE OF LEARNER/UNTRAINED* STAFF ACTIVITIES INCLUDED IN THE SAMPLE OF LEARNER ACTIVITIES ON SIX WARDS

Ward	Number of learner/ untrained staff activities**	Number in sample of learner activities.	%
Neville	87	42	48.3
Irena	113	56	50.0
Elizabeth	88	36	40.9
Charlotte	55	23	41.8
Naomi	98	40	40.8
Heaton	103	58	56.3

* Untrained staff, e.g. learners, auxiliaries, porters.

** Learner/untrained staff activities involving one or more learners recorded at 10 minute intervals.

Thus the sample of cases on each ward reflects not only the percentage of time that learners spent with the various groups, but also the overt teaching. Since the method of sampling is biased toward learner/trained staff activities, it is satisfying to find that the sub-samples correspond with the time learners spent both with the trained and the untrained members of staff.

The 10 minute activity sampling showed that learners on the six wards spent between 13.1 and 31.7 per cent of their time working with, or in the company of a trained person such as a sister, staff nurse, doctor or clinical teacher. Learners on Neville and Charlotte wards were in the presence of a trained person for approximately a third of their time, and the samples of learner activities on these two wards contain the two highest proportions of learner/trained staff activities. (Table 3). The learners on Heaton ward spent only 13.1 per cent of their time with a trained person and the sample on this ward contains a lower percentage of this type of case.

TABLE 3.

RELATIONSHIP OF THE SUB-SAMPLE OF LEARNER/TRAINED STAFF ACTIVITIES TO THE TIME LEARNERS SPENT WITH TRAINED STAFF

Ward	Time spent with trained staff* N.	%	Sub-sample learner/ trained activities % of whole sample.
Neville	498	31.7	52.0
Irena	565	16.5	37.1
Elizabeth	564	17.2	46.1
Charlotte	449	31.0	68.8
Naomi	513	15.2	42.4
Heaton	367	13.1	37.0

* 10 minute activity sampling.

The percentage of learner/untrained activities in the ward samples of learner activities, and the time learners on the differing wards spent working with, or in the presence of, untrained staff only (i.e. no trained person was present) also correspond. Thus the learners on Heaton ward spent the most time (66.8 per cent) with untrained staff and the sample of cases on this ward contains 63.0 per cent of this type of activity. In contrast, the learners on Charlotte ward spent only 21.6 per cent of their time in the company of untrained staff only, and the sample contains only 24.7 per cent of learner/untrained activities. (Table 4).

TABLE 4

RELATIONSHIP OF THE SUB-SAMPLE OF LEARNER/UNTRAINED STAFF ACTIVITIES TO THE TIME LEARNERS SPENT WITH UNTRAINED STAFF.

Ward	Time spent with untrained staff* N	%	Sub-sample learner/ untrained activities % of whole sample
Neville	498	34.7	42.0
Irena	565	46.5	53.3
Elizabeth	564	31.9	40.4
Charlotte	449	21.6	24.7
Naomi	513	40.0	43.5
Heaton	367	66.8	63.0

* 10 minute activity sampling (no trained person present)

DATE 26- -76 STAFF ACTIVITY SHEET MORNING ~~AFTER/NOON~~
WARD X
DAY Friday

STAFF CODE	9 00	9 10	9 20	9 30	9 40	9 50	10 00	10 10	10 20	10 30	10 40	10 50
Sen S. Act.	28 2	34 5	43/44	30 4	30 1	26 1	26 1	26 1	26 1	30 1	30 1	30 1
with	0	SN		W.C	Cons 2 Doc	Cons 2 Doc	Cons 4 Doc	Cons 4 Doc	Cons 4 Doc	Cons 3 Doc	Cons 4 Doc	Cons 4 Doc
	Pt OT	(Pt) OT	Pt OT	Pt OT	Pt OT	(Pt) OT	Pt OT	(Pt) OT	(Pt) OT	Pt OT	Pt OT	Pt OT
S.N. Act.	27	15	30	43/44	43/44	43/44	28	10	3	36	21	14
with	0	0	W.C				St.1A St1B	0	P 2	Ax	St1A St1B Doc	P.2
	Pt OT	(Pt) OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	(Pt) OT	Pt OT	(Pt) OT	Pt (OT)
Act.												
with												
	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with												
	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with												
	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
with												
	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Act.												
Ax. with	0	0	0	43/44	43/44	43/44	0	0	0	0	44	W.C
	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT	Pt OT
Cons.												
Docs.												
T. CT. NO.												
Ls. rota.												
P.2	0	43/44	43/44	0	0	0	0	0	SN (100)	St1A	0	SN (102)
St 2.	0	0	0	43/44	43/44	43/44	0	0	0	0	0	0
St 1 A	St1B (96)	43/44	43/44	St1B	0	St1B (95)	St1B SN.	St.1B	St1B	P2	Doc St1B SN (101)	St1B Doc
St 1 B	St1A	43/44	43/44	St1A (97)	0	St1A	St1A SN (99)	St1A	St1A	0	St.1A Doc Sn.	St1A Doc

The percentage of lone learner activities was deliberately small, since teaching could not take place when no other person was present. Such activities were only sampled when other activities were not available, therefore the size of this type of sample does not relate to ward activities. This is demonstrated in the accompanying completed Staff Activity Sheet, which is a replica of a sheet used in the research. No lone learner activities were included in the sample of activities between 9.00 a.m. and 10.50 a.m. even though a pupil nurse (P.2.) and a student nurse (St. 2.) spent much of their time alone.

The reader will also note that no sister/learner activities were sampled since the sister was not observed with any learners. But all observed staff nurse/learner activities were sampled (activities numbers 99, 100, 101, and 102). This record of an actual research situation also shows how, at 10.50 a.m. a student nurse (St.1.B) could not be interviewed about an activity involving a doctor and another student, which had continued for over 10 minutes, because the pupil nurse (P.2), who was also involved in a potential teaching situation with the staff nurse, was the next nurse on the rota, to be interviewed.

APPENDIX 20

WARD WORK LOAD PER NURSE PER HOUR

Degrees of activity

Data from 'validity check' sheets, comments from nurses and patients, and research notes that give meaning to the workload per nurse per hour units.

MORNING (9 a.m. - 12 noon)

Workload per nurse per hour	Type of ward.	Data source.	Comments.
QUIET			
4.91	Medical	Sister.	More staff than usual, quieter than usual.
4.91	Medical	Student	More staff than ever seen to-day.
4.91	Medical	Student	We were going to bedbath a patient but found he had already had one.
4.91	Medical	Research notes	SEN and 3 students descend to carry out same bath.
4.91	Medical	Students	"Are you doing anything"? Reply - "No, I'm keeping out of the way."
6.79	Medical	Sister	Quieter than usual. More staff Haven't been as quiet as this for ages.
6.79	Medical	Student	Usually more work.
8.33	Surgical	Sister	Ward not too busy.
8.33	Surgical	Auxiliary	Quieter.
8.99	Medical	Sister	*Busier than usual.
9.17	Medical	Sisters	Ward is much quieter than usual because half the patients are u
WORK LEVEL TOLERABLE - THE OPTIMUM			
10.09	Medical	Sister & Student	Quiet, two extra nurses from the 'pool'.
10.09	Surgical	Staff nurse.	More staff on duty this morning than in recent weeks.
10.09	Surgical	Auxiliary	*Very busy.
10.09	Surgical	Sister	Enjoyed myself. Had time to teach nurses. More staff. Quieter all round.
10.92	Medical	Student Research Notes	Staffing a bit low. 10.25 a.m. ward quiet - bedbath finished - not many patients in bed.

Workload per nurse per hour	Type of ward.	Data source.	Comments.
WORK LEVEL TOLERABLE - THE OPTIMUM (cont...			
12.47	Orthopaedic	Sister	Slacker than normally are.
12.47	Orthopaedic	Auxiliary	When we have more patients we are much busier.
	Orthopaedic	Auxiliary	We haven't many patients but the elderly ones take time.
12.48	Orthopaedic	Sister	Ward busy.
	Orthopaedic	Research Notes	After 1¼ hours no learner interviews - 6 waiting.
BUSY			
14.20	Surgical	Student	Mrs. X felt uncomfortable and her bed hadn't been done so w did her first. It is always like this on this ward - do what is most urgent.
14.20	Surgical	Research Notes	An air of 'busyness'. Two theatre lists in progress. Most learners working alone. Two trolleys arrive to take cases to theatre - at the same time.
			11 a.m. Difficulty finding spare time to interview learners - 6 waiting. All nurses engaged in work and porter putting patient on trolley (unaided) leaves patient to call student.
14.25	Medical	Student	The ward has been a little bit short staffed this mornin
14.92	Orthopaedic	Student	We don't always have as many nurses on.
14.92	Orthopaedic	Student	First ward I've been on where 'under pressure' - I like tha (Has not been on Elizabeth or Charlotte.)
VERY BUSY, BECOMING INCREASINGLY INTOLERABLE			
15.10	Surgical	Staff nurse.	A little short staffed, but that is not unusual.
15.10	Surgical	Research Notes	Student has to leave patient she was washing to help 1. Radiographer, 2. Staff nurse.

Workload per nurse per hour	Type of ward.	Data source.	Comments.
VERY BUSY, BECOMING INCREASINGLY INTOLERABLE.			
15.29	Orthopaedic	Student	More theatre cases than usual, quicker turnover. Staffing terrible.
15.29	Orthopaedic	Research Notes	Learners go straight from job to job. No time for interview.
15.29	Orthopaedic	Patient to another	"They're busy all the time Aren't they busy people?"
16.29	Surgical	Auxiliary	Bit hectic - like it.
16.92	Surgical	Research Notes	Asked to check medicine and guard trolley - impression 'very busy' - 6 interviews pending.
17.58	Orthopaedic	Sister	A bit more tumultuous than usual, with the doctors' round.
20.18	Surgical	Pupil	Busier. When busy, do whatever needs doing - she was next.
20.18	Surgical	Research Notes	Patient admitted on stretcher - Senior Sister helps her get into bed and in between goes to help auxiliary with another bed.
	Surgical	Research Notes	Staff nurse leaves patient on whom she is doing a dressing and takes a patient to theatre.
	Surgical	Research Notes	Doctor comes to examine patient. Staff Nurse "Sorry there is no one to chaperone you".
	Surgical	Research Notes	Clinical teacher and sister agree to cancel an assessment - not enough staff, too much to do, no one to help the learner.
	Surgical	Research Notes	So busy - haven't asked ANY nurse about activities. There really isn't time!

* Isolated comments which do not appear to follow the trend of other data.

AFTERNOON (2 p.m. to 4 p.m.)

Workload per nurse per hour	Type of ward.	Data source.	Comments.
TOO QUIET			
3.79	Medical	Sister	Staffing well over normal.
	Medical	Student	More staff than usual - although there is always an overlap in the afternoon.
	Medical	Student	They were talking and I wen to listen because there's nothing much to do and I didn't want it to appear that I was doing nothing.
	Medical	Sister	There are too many third years on at the moment. There's a limit to how many lectures you can give.
QUIET			
4.03	Medical	Staff nurse	Rather a quiet afternoon.
5.75	Surgical	Sister	Very quiet
	Surgical	SEN	It's usually busy - unlike to-day - haven't done much work.
6.22	Surgical	Staff nurse	More staff on.
7.92	Medical	Sister	It's much lighter than usual - a pleasure to come to work
	Medical	Student	Pretty boring afternoon really.
OPTIMUM			
9.00	Surgical	Student	Seem to have more staff on.
9.66	Orthopaedic	Sister	Better staffing this afternoon - nurses had time to turn cupboards out - don't usually have time.
9.86	Orthopaedic	Student	It looks like being another quiet one this afternoon - we're usually quiet in the afternoon.
10.00	Orthopaedic	Student	We weren't too busy.
	Orthopaedic	Student	To-day is quieter than most afternoons. A lot more staff than usual.
11.86	Surgical	Student	Quieter day. No operations in afternoon.
	Surgical	Staff nurse	Unusually quiet afternoon due to no theatre list.

Workload per nurse per hour	Type of ward.	Data source.	Comments.
OPTIMUM (cont...			
11.90	Orthopaedic	Student	"Busier". Sister (overhearing) Ward has been quiet whilst nurs has been there - only just hotting up.
	Orthopaedic	Student	Quiet afternoon.
12.70	Orthopaedic	Sister	Plenty of staff on.
BUSY			
13.44	Surgical	Sister	*More staff.
	Surgical	Student	Busier than usual.
	Surgical	Auxiliary	Bit hectic.
14.60	Orthopaedic	Student	Shortstaffed.
15.59	Surgical	Pupil	Referring to Sister questionnir her during an assessment replic "It doesn't happen very often, it's so busy, there's no time.

* Isolated comments which do not appear to follow the trend of other data.

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